SPECULA ASTRONOMICA VATICANA

ATLAS STELLARUM VARIABILIUM

SERIES SEPTIMA

EAS SUPPLENS STELLAS VARIABILES

QUAE AD SERIEM VI^{m} ACCESSERUNT

COMPOSITA A

M. ESCH S.J. ET J. G. HAGEN S.J.
SPECULAE COLL. VALKENBURGENSIS — SPECULAE VATICANAE

FRIBURGI BRISGOVIAE MCMXXVII
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Praefatio

Series septima huius Atlantis in specula Universitatis Georgiopolitanae incepta, interrupta vero, cum ad Speculam Vaticanam vocarer, post sectionem Catalogi Astrographici Vaticanam finitam, tandem aliquando continuari potuit.

Methodus enim photographica, cum de loco stellarum nullum dubium admittat nec eam ulla stella effugiat, omnino adhiberi debuit.

Instrumento ergo astrographico Vaticano D. Carolus Diadori, custos Speculae, regiones circa stellas variabiles photographica imagine expressit et «reproductione» photographica chartas convenientis mensurae effici curavit.

Quas chartas diligenter cum coelo comparans, omnes stellas ad certam variabilis stellae identificationem et lucis variationum observationem necessarias atque utiles elegi earumque gradus lucis, sicut in prioribus Seriebus, oculo determinavi.

Loca stellarum P. M. Esch Valkenburgi ex ipsis photogrammatis determinavit idemque magnitudines stellarum ex gradibus ope magnitudinum a Prof. Casimiro Graff secundum normam Harvardiensem photometrice determinatarum graphice deduxit.

Duae regiones circa *V Camelopardalis* et *U Draconis* pro nostro instrumento anglice installato inaccessibiles a specula Helsingfors photographice expressae sunt.

In assignandis stellis variabilibus ne error irreperet, praeter proprias observationes chartas photographicas a Dr. Shapley nobis missas adhibuimus.

Reliquum est, ut observatoriis Bergedorf-Hamburg, Harvard et Helsingfors, quae nobis tam benigne auxilium praebuere, maximas agamus gratias.

Roma, die 27 Aprilis 1927

J. G. Hagen S. J.
Speculae Vaticanae Director

Introductio

Charta huius Seriei est pars sphaerae, cuius radius aequivalet $\frac{360 \times 60}{2\pi} \times 3$ mm, in planitiem sphaeram tangentem ex centro proiecta. Linea verticalis per mediam chartam ducta cum proiectione circuli horarii ad aequinoctium 1925.0 pertinentis coincidit. Lineae terminantes dextra et sinistra, item superior et inferior a centro 90 mm = 30′ circiter distant.

Ascensio Recta et Declinatio, quae chartae inscribuntur, semper locum centri chartae definiunt. In hoc centro, vel fere symmetrice collocatae ad hoc centrum, inveniuntur stellae variabiles, exceptis iis, quae in inscriptione chartae uncis includuntur.

Catalogi stellas enumerant a lucidissimis usque ad debilissimas a P. Hagen aestimatas, quas interdum sequuntur paucae ex aliis fontibus desumptae, quarum tamen magna pars in chartis depicta non est; ultimo loco ipsae stellae variabiles ponuntur.

Secunda columna exhibet gradum lucis, quarta magnitudinem a Prof. Graff determinatam, tertia magnitudinem ex secunda et quarta graphice deductam, quinta et sexta magnitudinem et numerum catalogi BD, septima et octava, quae Δx et Δy inscribuntur, coordinatas rectangulares in centro chartae ortum habentes, quarum unitas est pars minuta circuli maximi. Ad calcem uniuscuiusque paginae sequuntur notae vel ad catalogos photometricos et catalogum Bu (= Burnham, A General Catalogue of Double Stars within 121^0 of the North Pole) referentes vel colores et alia a P. Hagen annotata indicantes.

Quodsi quis pro Δx et Δy differentias $\Delta\alpha$ et $\Delta\delta$ desiderat, cum minima pars indicata sit 0′.1, hoc modo procedere potest:

$$\Delta\alpha^s_{1925} = 4\,\Delta\alpha' = 4\,\Delta x \cdot \sec\,(D + \Delta y)$$

$$\Delta\delta'_{1925} = \Delta y - \frac{\lg\,\sec\,\Delta\alpha'}{\lg\,\mathrm{tg}\,(D + 1') - \lg\,\mathrm{tg}\,D}$$

ubi D declinationem in chartae capite inscriptam designat, differentia vero lg tg (D + 1′) — lg tg D in tabulis logarithmorum scripta invenitur.

Det Deus, ut multi etiam hac nova Serie alliciantur ad intense perscrutandas stellarum variationes, quo melius in dies cognoscamus opus Sapientissimi Creatoris.

E specula Collegii Valkenburgensis, die 19. Martii 1927

M. Esch S. J.

Speculae Vaticanae Astronomus Honorarius

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Seriei VII^{ae} Fasciculi I

Corrigenda

Series III, Charta 814, S Persei, Num. 54, Columna Δδ: pro + 3′.1 lege + 6′.1

,, ,, 2013, U Aurigae, ,, 22, ,, Δδ: ,, 17.2 ,, 13.8

Aggiunte alle Carte (Spec. Vat. XII), Tavola 4:

W Andromedae: omissa est stella Seriei VI^{ae}, Num. 5: $9^{M}.4$, $+11^{s}$, $+0'.1$

054974

V Camelopardalis

$5^h\ 43^m\ 29^s$ (1855.0) **$+74^\circ\ 29'.0$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1	0	7.3		$7^M.3$	73° 311	+12′.1	−30′.1
2*	15	7.8	$7^M.80$	8.2	74° 267	+ 9.1	− 0.6
3	43	8.7		8.1	74° 275	+35.5	+ 2.8
4	47	8.8		8.8	73° 306	+ 7.8	−33.2
5	52	9.0		8.8	73° 307	+ 7.8	−36.1
6	54	9.0		9.0	73° 309	+ 8.1	−29.4
7	61	9.2		8.8	74° 273	+32.0	−16.7
8	72	9.6		9.2	74° 271	+28.0	− 7.2
9	74	9.6	9.81	9.5	74° 268	+10.3	−15.7
10	75	9.6	9.44	9.0	74° 269	+13.7	− 6.1
11	79	9.7		9.3	74° 272	+30.0	− 3.4
12	89	9.9		9.5	75° 239	−28.6	+31.8
13	95	10.1		9.5	74° 264	−26.7	+13.5
14	100	10.2	10.18	9.5	74° 270	+17.1	+ 0.6
15	106	10.3		9.5	74° 265	−24.9	+ 2.1
16	107	10.3				+22.2	+ 8.5
17	108	10.3	10.18	9.5	74° 266	− 3.7	+ 3.2
18	111	10.4				−27.2	+21.0
19	118	10.8				− 8.6	+22.8
20	118	10.8				−23.8	− 8.2
21	127	11.3				+ 1.5	+30.3
22	128	11.4				− 1.7	+29.6
23	128	11.4				+ 6.7	+30.0
24	128	11.4	11.36			+ 6.8	+ 9.5
25	134	11.6				−14.2	−11.8
26	138	11.7				14.7	+10.2
27	138	11.7	11.75			+ 1.7	+ 9.6
28	139	11.8				−11.4	− 4.8
29	140	11.8				−17.0	+ 4.3
30	140	11.8	11.32			− 1.1	− 6.3
31	145	12.0	12.12			− 0.2	+ 7.3
32	145	12.0	11.81			+ 5.2	− 5.9
33	149	12.1				−19.6	+15.5
34	150	12.1	12.10			+ 4.0	+ 2.4
35	154	12.2				+14.7	−10.6

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
36	156	12.3				+14′.8	−11′.1
37	158	12.4				+19.3	− 5.5
38	160	12.5	$12^M.48$			− 6.5	+ 3.9
39	160	12.5				+16.2	− 2.9
40	162	12.5	12.55			− 6.9	+ 1.4
41	164	12.6	12.62			− 4.2	+ 0.9
42	166	12.7				−12.7	− 6.4
43	166	12.7				+12.2	+ 8.6
44	168	12.8				+12.8	+ 2.5
45	170	12.9				− 3.3	+ 3.1
46	171	12.9				−10.2	− 6.7
47	172	12.9				+18.2	+ 6.8
48	174	13.0				+ 1.9	− 4.8
49	174	13.0				+12.9	+15.6
50	175	13.1				+14.1	+ 2.6
51	177	13.1				−10.7	− 5.5
52	178	13.2				+ 2.6	+22.8
53	180	13.3				+ 9.4	− 3.8
54	183	13.4				+ 8.6	− 4.3
55	184	13.4	13.43			+ 5.1	+ 3.4
56	190	13.7				+ 7.7	− 1.0
57	190	13.7				+ 3.9	− 6.1
58*	190	13.7	13.70			− 0.4	− 1.9
59	192	13.9	13.97			+ 1.5	− 1.7
60	193	13.9				+ 5.9	− 3.6
61	195	14.0				+ 5.1	− 1.5
62	200	14.2				+ 5.4	− 0.8
63	203	14.3				+ 3.5	− 1.1
64	215	(14.8)				+ 4.7	+ 3.1
65		14.3	14.30			− 5.4	+ 3.2
66		14.7	14.68			− 8.5	− 0.7
67*		var			74° 266ª	0.0	0.0

1* HA 45 $7^M.34$ PD $7^M.56$ Bu 3062
2* Color = 7^C

58* dpl
67* V 8^m – $<15^M$

072820b

Z (& X) Puppis

$7^h\ 26^m\ 19^s$ (1855.0) **$-20^0\ 21'.0$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	6.8		$7^{M}.3$	19^0 1950	+22′.1	+31′.4
2	13	7.4		7.7	20^0 1980	−30 .6	− 9 .3
3*	22	7.8	$7^{M}.97$	8.0	20^0 1999	−11 .1	−16 .4
4	29	8.0	7.85	8.3	20^0 2003	− 7 .3	+ 6 .4
5	40	8.3		9.1	20^0 2017	+ 9 .2	+19 .1
6*	41	8.4	8.53	8.6	20^0 2009	+ 2 .0	8 .1
7	46	8.5		8.8	20^0 2036	+26 .8	+13 .3
8	49	8.5	8.39	8.7	20^0 2015	+ 7 .5	− 2 .7
9	51	8.6		8.7	20^0 2039	+29 .6	−19 .4
10*	53	8.7		9.1	20^0 2027	+20 .8	− 2 .8
11	56	8.9		9.2	20^0 1983	−27 .2	+20 .1
12	61	9.3		9.7	20^0 2023	+14 .3	+11 .7
13	66	9.6		9.2	20^0 2025	+17 .7	− 9 .2
14*	68	9.7	9.76				
15	68	9.7		9.1	20^0 1985	−25 .4	−21 .4
16	69	9.7		8.8	20^0 2033	+25 .9	−20 .7
17	74	9.8		9.2	20^0 2030	+22 .9	−22 .7
18	75	9.8		9.3	20^0 2012	+ 4 .1	+ 9 .5
19	77	9.8		9.4	20^0 2008	+ 1 .4	+13 .3
20	78	9.8		9.1	20^0 2038	+28 .2	−23 .7
21	78	9.8		9.4	20^0 1989	−18 .6	− 5 .4
22	79	9.8		9.3	20^0 2010	+ 2 .3	+10 .1
23	79	9.8		9.4	20^0 1992	−17 .5	− 5 .6
24	81	9.9		9.6	20^0 2024	+16 .3	+ 3 .1
25	82	9.9	9.88	9.3	20^0 2014	+ 6 .3	− 3 .7
26*	82	9.9		9.4	19^0 1945	+ 9 .7	+23 .9
27	83	9.9		9.3	20^0 2029	+21 .7	−13 .5
28	84	9.9		9.3	20^0 1982	−27 .5	+10 .8
29	85	9.9		9.4	20^0 2021	+13 .1	− 4 .8
30	86	9.9		9.5	19^0 1949	+21 .3	+21 .2
31	88	10.0		9.5	20^0 2034	+26 .7	+14 .6
32	91	10.0		9.2	20^0 2026	+18 .4	−18 .9
33	94	10.1				+10 .1	+10 .3
34	97	10.1	10.05	9.4	20^0 2013	+ 4 .8	−15 .7
35	98	10.2		9.8	20^0 1997	−13 .9	+10 .6
36	99	10.2		9.5	20^0 1984	−25 .9	−17 .3
37	101	10.3				−13 .2	+ 7 .3
38	102	10.3	10.16	9.9	20^0 2006	0 .0	− 5 .6
39	102	10.3	10.44	9.4	20^0 2016	+ 7 .6	+ 1 .4
40	102	10.3		9.5	20^0 1995	−15 .5	−19 .3
41*	102	10.3				−21 .5	+ 8 .2
42	106	10.6	10.74	10	20^0 2007	+ 0 .4	+ 0 .2
43	106	10.6		9.8	19^0 1931	−14 .5	+24 .0
44	107	10.6		9.8	19^0 1930	−15 .9	+21 .2
45	107	10.6				+11 .6	+ 3 .0

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
46	109	10.7				+ 8′.4	− 7′.5
47	109	10.7	$10^{M}.47$	$9^{M}.8$	20^0 2001	− 8 .2	− 4 .6
48	109	10.7		9.6	20^0 1994	−16 .7	−19 .5
49	111	10.8				− 5 .5	+ 4 .4
50	111	10.8	10.84			+ 1 .6	− 1 .0
51	111	10.8				+ 9 .2	−18 .8
52	111	10.8				−24 .8	+ 9 .5
53	112	10.8				+11 .2	+ 2 .7
54	112	10.8		10	20^0 1986	−24 .3	−18 .3
55	112	10.8	10.66	9.7	20^0 2005	− 0 .8	20 .9
56	113	10.9				+ 9 .7	−15 .6
57	114	10.9	11.18			− 5 .2	+ 0 .1
58*	114	10.9				−21 .2	+ 8 .2
59	115	10.9				+ 5 .0	+ 6 .4
60	116	11.0				+ 8 .1	− 6 .9
61	116	11.0	11.20			+ 1 .9	+ 1 .1
62	116	11.0				−13 .7	+ 1 .0
63	117	11.0				− 8 .5	+ 5 .7
64	117	11.0				−12 .9	−11 .2
65	117	11.0				+ 0 .3	− 7 .4
66	118	11.1	11.07			+ 1 .6	− 3 .7
67	118	11.1				− 2 .2	−13 .0
68	118	11.1		10	20^0 1993	−15 .7	−13 .9
69	120	11.1				+ 8 .0	−19 .8
70	122	11.2				− 0 .1	+ 3 .1
71	123	11.2	10.84	10	20^0 2004	− 1 .4	−21 .8
72	125	11.3				− 7 .4	−11 .2
73	128	11.4				− 0 .9	+ 5 .5
74	131	11.5				+ 2 .6	+ 2 .2
75	132	11.6				−17 .0	−15 .6
76	133	11.6				+ 5 .4	−14 .9
77	134	11.7	11.68			+ 2 .5	+ 0 .7
78	134	11.7				−16 .1	−15 .3
79	140	11.9				+ 3 .6	− 1 .6
80	140	11.9				+ 5 .1	−16 .8
81	144	12.1				+ 2 .4	− 1 .1
82	146	12.2				+ 4 .0	−14 .7
83	147	12.2	12.19			− 1 .0	+ 0 .3
84		13.2	13.21			− 1 .0	− 2 .0
85		13.3	13.33			− 2 .9	− 0 .7
86		13.7	13.69			+ 1 .0	+ 1 .1
87*		var				0 .0	0 .0
88*		var			20^0 2011	+ 2 .2	−15 .1

1* HA 24 $6^{M}.81$
3* Bu 4119
6* Graff: var?

10* Color = $7^{C}.5$
14* Bu 4119 comes (7^{C})
26* neb. planet.? (-2^{C})

41* + 58* = BD -20^0 1988, $9^{M}.4$
87* Z $7^{1}/_{2}{}^{M}$ — 14^{M} 8^{C}
88* X 8^{M} — 9^{M} 6^{C}

130212

RV Virginis

$13^h\ 0^m\ 18^s$ (1855.0) **$-12^{\circ}\ 23'.3$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
1*	0	7.5		$8^M.2$	12° 3762	+15′.1	−16′.6	21	95	12.0	$11^M.95$		+ 2′.4	− 6′.0
2*	9	7.9		7.8	12° 3760	+ 2.6	+ 2.9	22	96	12.0	12.01		+ 3.4	− 3.5
3*	22	8.6		8.5	12° 3767	+33.6	+ 4.3	23	100	12.2			− 5.0	+10.3
4*	26	8.8		8.5	12° 3751	−34.3	+22.7	24	106	12.4			− 9.7	− 4.6
5*	31	9.0		9.1	12° 3755	−25.2	−34.9	25	107	12.5	12.49		+12.2	+ 5.4
6*	32	9.1		8.5	11° 3442	− 7.6	+30.0	26	110	12.5			+ 0.1	+13.9
7*	36	9.3		8.7	12° 3750	−40.1	+23.1	27	117	12.6			+10.0	− 8.0
8*	46	9.7		9.3	12° 3766	+28.4	−14.4	28	119	12.7	12.58		+ 7.9	+ 9.6
9*	49	9.9		9.4	12° 3761	+ 7.1	−20.7	29	123	12.8			+ 4.1	+11.8
10*	53	10.1		9.5	12° 3756	−23.6	− 4.2	30	125	12.9			+ 4.9	+ 8.4
11*	54	10.1		9.4	12° 3763	+20.1	−28.2	31	128	13.1	13.15		+ 6.3	+ 4.0
12*	54	10.1		9.3	12° 3757	− 3.7	−25.6	32	130	13.2			− 0.7	+14.0
13*	65	10.7		9.6	12° 3752	−31.2	+ 7.3	33	133	13.3			− 4.6	− 8.1
14	66	10.7	$10^M.75$	9.6	12° 3759	+ 1.1	+ 0.1	34	137	13.5	13.46		+ 4.2	+ 0.9
15	71	11.0		9.4	12° 3754	−29.4	− 0.2	35	149	14.1	14.10		+ 0.1	+ 0.9
16	75	11.2				+ 3.5	+19.6	36	157	14.3	14.29		+ 5.9	+ 0.4
17	78	11.3	11.32	10	12° 3758	− 2.7	+ 1.0	37	163	14.6	14.56		− 1.8	− 2.5
18*	85	11.6				+23.0	− 2.7	38*		var			0.0	0.0
19	87	11.7				−22.4	−10.6							
20*	95	12.0				+23.0	− 2.7							

1*—13* magnitudines stellarum minus certae
9* HA 74 $9^M.87$
18* + 20* = BD −12° 3764, $9^M.4$

38* RV 10^M — $14\frac{1}{2}^M$

140113

Z Bootis

$13^h\ 59^m\ 28^s$ (1855.0) $+14^0\ 10'.7$

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1	0	8.8	$8^{\mathrm{M}}.84$	$8^{\mathrm{M}}.7$	14^0 2692	−48′.7	+ 9′.5	17	95	11.7				−27′.5	− 8′.1
2	20	9.6		9.0	14^0 2693	−36 .7	+41 .1	18	96	11.8	$11^{\mathrm{M}}.92$			− 2 .4	+13 .5
3	29	9.9		9.2	14^0 2701	+ 3 .8	+34 .5	19	97	11.8				+12 .8	−11 .4
4	38	10.1		9.3	14^0 2695	−31 .3	− 7 .9	20*	101	11.9				+24 .4	− 1 .7
5	42	10.2	10.21	9.4	14^0 2699	− 3 .3	− 6 .8	21	103	11.9	11.86			−14 .6	− 0 .9
6	45	10.2	10.16	9.3	14^0 2697	− 7 .6	+13 .3	22	115	12.2				+ 0 .1	+11 .8
7	45	10.2		9.3	14^0 2702	+ 9 .6	+30 .3	23	123	12.5				−11 .4	+14 .2
8	54	10.3	10.27	9.4	14^0 2698	− 4 .0	+21 .7	24	128	12.6	12.75			− 9 .5	− 4 .0
9	59	10.4	10.41	9.5	14^0 2696	−15 .8	+16 .7	25	130	12.6	12.48			− 8 .6	+ 3 .8
10	79	11.2				+ 4 .8	+33 .2	26	142	13.4	13.43			+ 2 .1	− 2 .6
11	82	11.3	11.34			− 6 .9	− 2 .2	27*	149	14.0				+ 5 .9	− 2 .4
12	84	11.3		9.5	13^0 2746	8 .4	14 .9	28	159	14.8	14.82			− 3 .4	+ 5 .9
13*	88	11.4	11.25			+23 .6	− 1 .7	29		14.3	14.34			− 9 .4	+ 4 .7
14	90	11.5				− 8 .7	−23 .6	30*		(15.3)	(15.3)				
15	92	11.6				−31 .6	−14 .1	31*		var			14^0 2700	0 .0	0 .0
16	93	11.6				+21 .8	+14 .5								

13* + 20* = BD + 14^0 2703, $9^{\mathrm{M}}.5$

27* dpl

30* Graff: $\Delta\alpha = +4^s$, $\Delta\delta = +3'.9$ (1855)

31* Z $9^{\mathrm{M}} - 14^{\mathrm{M}}$

150605

Y Librae

15^h 4^m 2^s (1855.0) − **5° 27′.6**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		8.0		7.ᴹ5	5° 4017	−42′.6	− 8′.7
2*	0	8.4		8.0	4° 3828	+ 1.0	+31.7
3	9	8.8	8.ᴹ78	8.7	5° 4029	+ 0.4	+10.4
4	14	9.0	8.97	9.0	5° 4021	−34.3	−13.4
5	23	9.4		9.0	4° 3827	+ 0.8	+32.2
6	26	9.5		9.2	5° 4016	−51.3	+ 4.0
7	35	10.0	9.95	9.4	5° 4025	−16.0	−14.2
8	43	10.3	10.42	9.5	5° 4024	−22.2	−13.1
9	50	10.5	10.59	9.5	5° 4023	−24.1	− 9.9
10	53	10.5	10.34	9.4	5° 4031	+15.8	+ 7.2
11	62	10.8		9.5	5° 4030	+ 9.4	−20.8
12	65	10.9	10.90	9.6	5° 4019	−40.5	− 5.7
13	68	11.0		9.8	5° 4027	− 6.3	+18.2
14	76	11.2	11.20	9.8	5° 4028	− 3.0	+10.1
15	79	11.3	11.30			+ 6.7	+ 9.3
16	80	11.3		9.5	5° 4032	+27.7	−22.5
17*	84	11.4				− 8.8	+25.6
18	88	11.4				−29.0	+ 9.6
19	89	11.4				+ 9.5	−26.7
20*	94	11.5				− 8.6	+26.1
21	97	11.5				−10.5	−20.3
22	103	11.6	11.54			+ 8.5	− 7.3
23	106	11.6				1′.9	+11′.2
24	111	11.7				−16.7	−19.2
25	115	11.8				+17.6	+12.6
26	116	11.8				+ 7.1	−11.1
27	119	11.8				−10.7	−20.9
28	122	11.9				+ 0.9	−10.5
29	123	11.9				−10.9	+ 9.1
30	127	12.0	12.ᴹ01			−11.5	+ 6.1
31	131	12.1				+14.1	+ 5.1
32	133	12.1	12.04			+ 0.4	+ 1.6
33	137	12.4	12.47			+ 6.8	− 2.9
34	137	12.4				+ 1.3	−13.2
35	138	12.4				−12.7	0.0
36	145	12.8				− 8.1	+ 1.9
37	147	12.9	12.88			+ 2.5	− 1.8
38*	(149)	(13.0)				−14.5	4.5
39	151	13.2	13.24			− 1.9	+ 4.1
40	153	13.4	13.41			− 4.9	+ 7.7
41	(157)	(13.7)				+ 1.4	13.4
42	163	14.1	14.08			+ 0.2	− 2.1
43	178	14.7	14.76			+ 3.7	+ 1.6
44*		var				0.0	0.0

1* HA 45 8.ᴹ04 Bu 7131
2* Bu 7151
17* + 20* = BD − 5° 4026, 9.ᴹ5

38* dpl
44* Y $8^M - < 14^M$

155823

RZ Scorpii

$15^h\ 57^m\ 8^s$ (1875.0) **−23° 45′.2**

Num.	Grad.	Magn.	Bgd.	CoD		1925.0 Δx	Δy
1*		5.9		$6^{M}.2$	23° 12 700	+20′.9	+29′.5
2*		6.4		6.8	24° 12 499	− 9 .7	−37 .5
3*	0	7.3	$7^{M}.34$	7.3	23° 12 692	+13 .5	− 7 .5
4	9	7.7		8.1	23° 12 687	+10 .0	+25 .8
5	13	7.9	7.94	7.6	23° 12 656	−22 .6	− 4 .3
6	24	8.3		8.6	23° 12 717	+39 .8	+ 8 .6
7	29	8.4		8.9	24° 12 488	−18 .9	−33 .7
8	36	8.6		8.8	23° 12 709	+31 .8	− 3 .4
9	37	8.6		8.6	23° 12 639	−40 .1	−13 .3
10	38	8.7		8.8	23° 12 707	+31 .3	+26 .9
11*	44	8.8		9.0	24° 12 473	−29 .5	−28 .7
12	48	8.9		9.0	23° 12 637	−41 .4	−10 .9
13	53	9.1	9.10	9.3	23° 12 682	+ 7 .8	+ 3 .4
14	60	9.3		9.1	23° 12 679	+ 4 .8	+28 .2
15	63	9.3		9.0	23° 12 649	−27 .7	+25 .3
16	65	9.4		9.4	23° 12 652	−26 .1	− 8 .8
17	71	9.5	9.49	9.2	23° 12 670	− 3 .7	+21 .1
18	74	9.5	9.43	9.3	23° 12 660	−15 .5	−14 .0
19	86	10.1		9.7	23° 12 698	+19 .8	−14 .4
20	89	10.2	10.51	9.9	23° 12 663	−11 .8	−10 .6
21	95	10.3	10.10	9.5	23° 12 693	+14 .3	− 0 .1
22	98	10.4	10.45	9.8	23° 12 690	+12 .2	+ 0 .2
23	106	10.6		9.6	23° 12 657	−21 .1	− 3 .4
24	107	10.6		9.7	24° 12 523	+11 .6	−27 .6
25	112	10.7		9.7	23° 12 688	+10 .6	−13 .3
26	116	10.8		9.6	23° 12 681	+ 6 .4	+ 6 .4
27	120	10.9	10.87	9.9	23° 12 689	+11 .1	− 5 .4
28	121	10.9		9.7	23° 12 683	+ 8 .5	+ 6 .1
29	126	10.9		9.9	24° 12 530	+19 .7	−21 .0
30	135	11.1		9.7	24° 12 493	−14 .8	−25 .9
31	138	11.1		10	23° 12 654	−23 .7	+ 3 .7
32	143	11.2		10	23° 12 651	−26 .6	+ 4 .1
33	144	11.2	11.18	9.9	23° 12 684	+ 8 .4	− 2 .7

Num.	Grad.	Magn.	Bgd.	CoD		1925.0 Δx	Δy
34	151	11.2		10^{M}	23° 12 658	−20′.2	+14′.5
35	152	11.3		10	23° 12 674	− 0 .5	−14 .4
36	155	11.3		10	24° 12 507	− 4 .7	−15 .7
37	161	11.3		10	23° 12 661	−14 .6	+ 4 .8
38	161	11.3	$11^{M}.24$	10	23° 12 664	− 5 .9	− 4 .1
39	164	11.4		10	23° 12 680	+ 6 .2	+ 1 .2
40	166	11.5		10	24° 12 508	− 1 .9	−18 .2
41	167	11.6				+ 8 .1	+ 3 .0
42	170	11.8		10	23° 12 686	+ 9 .5	+ 0 .6
43	171	11.8		10	23° 12 671	− 2 .2	−12 .3
44	172	11.9				− 1 .3	+13 .4
45	174	12.0		10	23° 12 665	− 5 .6	+14 .9
46	174	12.0				+12 .8	− 0 .6
47	175	12.0		10	23° 12 675	− 0 .3	+12 .2
48	176	12.1	12.23			+ 1 .2	− 1 .8
49	178	12.1		10	23° 12 673	− 1 .8	+10 .2
50	179	12.1	11.96			− 4 .3	+ 2 .7
51	180	12.2		10	23° 12 672	− 2 .1	− 8 .5
52	180	12.2				+ 0 .2	+ 8 .1
53	182	12.2				+14 .0	− 2 .4
54	183	12.3				+ 4 .1	− 1 .6
55	185	12.4				+ 3 .9	+ 0 .1
56	185	12.4				+ 4 .6	+10 .1
57	186	12.4				− 1 .0	− 2 .0
58	188	12.5				+ 0 .9	−10 .3
59	189	12.6				− 6 .5	− 2 .2
60*	190	12.7				−11 .4	− 6 .0
61	193	12.8				+ 3 .6	− 2 .1
62	195	13.0				− 4 .1	+13 .0
63	195	13.0				− 6 .3	−14 .5
64	201	13.3				+ 5 .7	− 1 .4
65	205	13.5	13.55			+ 0 .5	+ 0 .6
66*		var			23° 12 676	0 .0	0 .0

1* HR $5^{M}.94$
2* HR $6^{M}.42$
3* HA 45 $7^{M}.45$
11* Bu 7476

60* dpl
66* RZ 8^{M} — 13^{M}

164319

RR Ophiuchi

16h 40m 33s (1855.0) **−19° 12′.0**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	8.1		7ᴹ.4	18° 4336	+30′.3	+16′.4
2	4	8.3		7.9	18° 4330	+ 6.9	+32.2
3	5	8.3		8.3	19° 4436	+ 3.2	+12.4
4	10	8.5		8.0	19° 4431	− 6.9	+11.1
5	21	9.0		8.3	19° 4443	+26.2	−22.6
6	25	9.2		8.5	19° 4427	−17.9	−24.5
7*	32	9.5		8.7	19° 4434	− 0.2	− 8.4
8*	36	9.6				− 0.4	− 8.5
9	43	9.9		9.2	19° 4445	+30.5	−18.5
10	44	10.0	9ᴹ.96	9.0	19° 4429	−13.3	+ 5.6
11	48	10.1		8.7	18° 4334	+25.3	+24.5
12	58	10.2	10.21	9.4	19° 4439	+ 9.9	+ 1.0
13	65	10.5		9.4	19° 4444	+28.3	− 1.6
14	67	10.6		9.3	18° 4328	+ 1.2	+28.9
15	67	10.6	10.56	9.5	19° 4430	−11.1	− 6.5
16	72	10.7		9.5	19° 4442	+22.7	−11.0
17	81	10.9				− 7.0	−17.1
18	82	10.9	10.94			− 4.0	− 2.6
19	84	11.0		9.5	19° 4438	+ 9.8	−24.3
20	90	11.1		9.5	19° 4433	− 1.9	−27.0
21	90	11.1				−12.1	− 8.3
22	91	11.1		9.7	19° 4428	−17.8	−19.0

Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
23	97	11.3			−13′.7	+ 6′.6
24	97	11.3	11ᴹ.25		+ 2.4	+ 3.0
25	102	11.5			+19.2	− 2.6
26	103	11.6	11.62		+ 4.4	+ 3.1
27	106	11.7			−12.9	− 8.2
28	109	11.8			− 3.6	−15.2
29	109	11.8			+ 3.5	−15.1
30*	112	11.9			+16.2	−22.4
31	120	12.1			+ 3.9	− 6.1
32	120	12.1	12.05		− 8.8	+ 2.4
33	122	12.2			+ 9.7	− 2.5
34	125	12.3			+ 8.9	−11.8
35	127	12.4			+ 9.4	− 4.7
36	130	12.5	12.49		+ 4.4	+ 6.1
37	132	12.7			+12.7	−12.5
38	134	12.8	12.85		− 6.7	+ 1.9
39	135	12.8	12.67		+ 4.5	+ 0.7
40	136	12.9			+ 8.8	−10.7
41	142	13.4			+13.0	− 9.4
42	144	13.6	13.57		− 0.7	+ 0.9
43		14.1	14.05		+ 0.9	+ 1.7
44*		var		19° 4435	0.0	0.0

1* HA 45 8ᴹ.12
7* + 8* Bu 7760

30* dpl
44* RR 8½ᴹ — <14ᴹ

165631

RV Herculis

$16^h\ 55^m\ 2^s$ (1855.0) **$+31^0\ 26'.4$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δx
1*		3.9		$3^M.5$	31^0 2947	− 3′.4	−17′.9
2*		6.6		7.4	32^0 2835	+22 .4	+39 .5
3	0	8.2		8.0	31^0 2942	−20 .2	+14 .9
4	9	8.4		8.0	31^0 2953	+30 .0	+27 .9
5	30	9.0	$8^M.96$	8.6	31^0 2951	+12 .1	+ 0 .9
6	46	9.3		8.6	31^0 2936	−33 .2	−12 .6
7	49	9.4	9.52	9.0	31^0 2950	+11 .3	+15 .3
8	57	9.5	9.43	9.0	31^0 2946	− 6 .3	−17 .1
9	67	9.8	9.84	9.3	31^0 2944	10 .7	+15 .2
10	69	9.9		9.2	31^0 2945	− 8 .5	−21 .9
11	70	9.9		9.0	31^0 2937	−29 .3	− 6 .2
12	74	10.1		9.1	31^0 2940	−26 .1	−12 .6
13	76	10.1	10.14	9.2	31^0 2949	− 2 .4	− 7 .8
14	80	10.2		9.3	30^0 2915	−15 .9	−26 .7
15	81	10.3		9.5	31^0 2941	−20 .2	+ 9 .3
16	82	10.3				−22 .2	+19 .9
17	83	10.4		9.3	31^0 2952	+29 .3	−25 .2
18	92	10.7		9.5	31^0 2948	− 2 .5	−23 .9
19	96	10.8				+24 .1	+10 .9
20	102	11.0				+27 .2	+ 9 .5
21	105	11.1		9.4	30^0 2910	−28 .9	−29 .6
22	110	11.3	11.28			+ 3 .0	+ 8 .8
23	114	11.3				− 1 .0	−24 .0
24	126	11.5				− 2 .2	−16 .4
25	129	11.5				+29 .1	−25 .8

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
26	132	11.6				− 2′.1	−16′.7
27	134	11.6				+ 0 .7	−14 .7
28	137	11.6	$11^M.55$			− 5 .7	+ 1 .5
29	146	11.8				−13 .8	− 7 .6
30	151	11.9				− 9 .1	− 6 .8
31	157	12.0				−11 .8	− 3 .2
32	162	12.1				− 7 .9	−14 .5
33	164	12.1	12.07			+ 2 .2	+ 4 .1
34	167	12.2				− 5 .0	+ 0 .5
35	168	12.3	12.50			+ 5 .7	− 8 .0
36	176	12.4	12.53			+ 6 .1	+ 2 .5
37	178	12.4	12.33			+ 3 .1	− 7 .1
38	184	12.6				+ 8 .3	+ 1 .8
39	189	12.8	12.80			− 2 .4	− 5 .6
40	192	13.0				− 1 .3	+ 6 .6
41*	193	13.1				− 3 .0	+11 .9
42	193	13.1				+ 6 .7	+ 9 .0
43	196	13.3	13.28			+ 1 .1	− 2 .6
44	201	13.4				− 2 .9	+ 4 .7
45	201	13.4				+ 2 .9	+ 7 .9
46	222	13.8	13.81			+ 1 .9	+ 2 .9
47		13.3	13.30			+ 5 .7	− 3 .6
48		14.1	14.10			+ 6 .5	− 2 .3
49*		var			31^0 2949^a	0 .0	0 .0

1* HR $3^M.92$ PD $4^M.16$
2* HR $6^M.60$ PD $6^M.62$

41* dpl
49* RV 10^M — $15^1/_2{}^M$

170627

RT Herculis

17^h 4^m 59^s (1855.0) **+27° 14′.9**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1	0	8.5		8.ᴹ5	26° 2967	+13′.1	−26′.9
2	3	8.7		8.9	26° 2970	+21.0	−21.6
3	5	8.8		8.7	27° 2766	−25.0	+33.6
4	8	8.9	8.ᴹ94	9.0	27° 2777	+14.6	+ 7.1
5	13	9.3	9.40	9.1	27° 2774	+ 2.9	+ 6.7
6	15	9.4	9.46	9.2	27° 2769	−15.3	+ 9.6
7	19	9.5	9.41	9.2	27° 2778	+15.9	+ 8.3
8	24	9.8				+19.4	+24.6
9	27	9.9		9.2	27° 2767	−18.5	−10.2
10	30	10.1	10.08	9.2	27° 2768	−17.1	+ 9.6
11	46	10.5	10.46			− 4.9	+ 7.4
12	53	10.8				+23.5	−22.3
13	57	10.9		9.4	26° 2965	+ 7.4	−17.2
14	60	11.0		9.5	26° 2962	−18.2	−19.0
15	65	11.2	11.28	9.5	27° 2775	+ 8.0	− 7.5
16	65	11.2				+ 6.8	+18.7
17	65	11.2				+ 7.2	+19.5
18	65	11.2				+36.6	−10.8
19	66	11.2				−14.6	+ 4.8
20	67	11.2		9.5	27° 2776	+14.2	+15.1
21	67	11.2				+30.1	+27.4
22	71	11.3				− 6.7	+14.0
23	72	11.3				+ 6.5	+19.3
24	74	11.3				− 5.0	−12.6
25	76	11.3				+19.8	−16.6

Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
26	80	11.4			− 1′.2	+14′.2
27	81	11.4			− 2.5	−20.8
28	81	11.4			+ 7.8	+ 5.9
29	83	11.4			− 4.0	−20.9
30	85	11.4			− 0.3	−18.6
31	90	11.5			−10.4	−22.9
32	93	11.5	11.48		− 9.8	+ 5.3
33	97	11.6			+11.7	−13.0
34	100	11.8			+15.7	+ 6.0
35	109	12.2	12.18		+ 8.3	− 4.5
36	113	12.5	12.80		+ 1.3	− 8.5
37	116	12.6	12.62		+ 9.1	− 4.2
38	121	12.7			+ 5.6	+ 3.6
39	127	12.7	12.66		− 3.9	− 3.6
40	130	12.8			− 8.0	−11.0
41	135	12.9			− 3.7	−14.0
42	138	12.9	12.85		+ 4.1	− 7.9
43	142	13.1			− 2.1	− 9.6
44	145	13.4			− 1.3	−11.7
45*	(148)	(13.6)			+ 7.8	+10.5
46	153	13.9	14.14		+ 0.7	− 4.1
47	158	14.0	13.80		+ 2.9	− 2.7
48	164	14.2			+ 3.3	+ 2.4
49	167	14.3			− 2.2	− 2.2
50*		var			0.0	0.0

45* dpl
50* RT $9^M - < 14^M$

175519

RY Herculis

17^h 53^m 28^s (1855.0) + **19° 29′.7**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		6.4		6^M.5	19° 3494	+10′.1	+ 1′.4
2	0	(7.7)		8.5	18° 3527	+17 .9	−31 .0
3	17	8.3	8^M.25	8.5	19° 3495	+13 .6	+ 8 .3
4	21	8.7		9.0	19° 3485	− 5 .0	−19 .2
5	22	8.8		9.1	19° 3478	−26 .5	−23 .7
6	27	9.4	9.38	9.0	19° 3489	+ 0 .2	− 2 .0
7	31	9.4		9.3	19° 3501	+35 .4	−15 .6
8	32	9.5		9.3	19° 3492	+ 8 .6	+17 .4
9	42	9.6		9.3	19° 3498	+20 .9	+12 .1
10	43	9.7		9.0	19° 3496	+18 .0	−28 .6
11	57	9.9	9.94	9.3	19° 3483	−14 .2	− 7 .0
12	58	9.9		9.3	19° 3486	− 2 .1	−23 .7
13	66	10.1	10.03	9.2	19° 3484	−11 .4	+ 0 .5
14	66	10.1		9.3	19° 3480	−19 .1	−16 .4
15	73	10.4				+19 .8	−14 .1
16	74	10.4		9.3	19° 3491	+ 4 .2	−21 .1
17	81	10.8		9.3	19° 3493	+10 .3	−16 .3
18	84	10.9	10.88			+ 8 .1	− 1 .9
19	86	11.0		9.4	19° 3490	+ 0 .4	−27 .4
20	86	11.0				+19 .6	+ 1 .3
21	88	11.1		9.5	19° 3488	− 0 .2	−28 .7
22	89	11.2	11.21			+11 .3	+ 0 .9
23	90	11.2		9.5	19° 3499	+26 .2	− 2 .3
24	97	11.3		9.4	19° 3487	− 0 .7	−22 .2
25	102	11.4				− 9 .4	+ 9 .7
26	103	11.4				+ 5 .3	−14 .7
27	108	11.5				−24 .9	−20 .6
28	110	11.5				+19 .1	−19 .6
29	114	11.6		9.5	19° 3481	−17 .0	−21 .1
30	116	11.6	11.58			+ 1 .6	+ 2 .9
31	117	11.7				− 4 .1	−24 .3
32	119	11.7				+19 .1	− 6 .1
33	120	11.8				−10 .5	+12 .4
34	120	11.8		9.5	19° 3482	−14 .8	−22 .7
35	121	11.8				− 1 .1	−11 .2
36	121	11.8				+ 8 .1	+ 1 .5
37	124	11.9				+14 .1	− 5 .6
38	127	12.0		9.5	19° 3479	−21 .8	−16 .9
39	127	12.0				+11 .0	+14 .8
40	131	12.1	12.04			− 2 .9	− 2 .0

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
41	132	12.1				+ 3′.0	−23′.4
42	136	12.3	12^M.28			+ 4 .1	+ 3 .7
43	138	12.3				− 0 .5	+14 .4
44	139	12.4				−12 .1	− 9 .8
45	141	12.4				+ 7 .2	+13 .2
46	142	12.5				− 5 .8	−16 .8
47	143	12.5				− 6 .7	−10 .9
48	145	12.5				+ 1 .4	+ 8 .5
49	148	12.6				−10 .2	−18 .9
50	149	12.6				−12 .6	−11 .9
51	149	12.6	12.63			+ 5 .7	− 0 .7
52	151	12.7				−11 .0	−12 .9
53	152	12.7				+ 1 .2	+10 .2
54	155	12.8				−12 .0	−11 .6
55*	(155)	(12.8)				−10 .2	− 3 .9
56	158	12.9				+11 .3	−14 .4
57	160	13.0				− 9 .7	− 5 .0
58	161	13.0				+ 9 .6	− 8 .6
59	161	13.0				+12 .7	− 6 .3
60	163	13.1				+ 5 .5	−13 .0
61	164	13.1				+ 9 .8	−12 .9
62	167	13.2				− 5 .4	− 9 .7
63	168	13.3				− 3 .4	−10 .3
64	171	13.4				− 3 .5	− 6 .5
65	172	13.4	13.38			− 2 .5	− 1 .0
66	176	13.5				− 4 .9	−10 .0
67	178	13.5	13.53			+ 2 .4	− 3 .6
68*	(179)	(13.6)				− 0 .4	− 8 .5
69	181	13.6				− 3 .0	−10 .3
70	183	13.7				+ 8 .3	− 9 .3
71	183	13.7				0 .0	− 2 .6
72	185	13.7				− 4 .2	+ 0 .8
73	188	13.8				+ 3 .0	+ 2 .1
74	194	14.0				− 4 .4	+ 1 .2
75	203	14.3				+ 2 .8	+ 1 .9
76	208	14.5				+ 0 .4	− 0 .6
77		10.8	10.76			−20 .0	− 1 .7
78*		var			19° 3489*	0 .0	0 .0

1* HR 6^M.42 PD 6^M.70

55*, 68* dpl

78* RY 8^M — 13½^M

175654

V Draconis

$17^h\ 55^m\ 24^s$ (1855.0) **$+54^\circ\ 53'.0$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1	0	8.5	$8^M.46$	$8^M.3$	55° 2001	+ 1′.1	+14′.4
2	20	9.1		8.9	54° 1932	+22 .7	−35 .6
3	21	9.1		8.5	55° 1997	− 18 .7	+20 .0
4	31	9.4		9.0	54° 1931	+21 .3	+ 0 .1
5	32	9.4		8.9	55° 2009	+26 .8	+13 .2
6	39	9.6		9.0	55° 2003	+11 .8	+ 9 .8
7	47	9.9		9.5	55° 1999	− 6 .5	+21 .0
8	48	9.9		9.4	55° 2000	− 1 .0	+20 .5
9	49	9.9				+29 .2	+18 .7
10	50	10.0		9.5	55° 2005	+17 .0	+11 .2
11	55	10.1		9.5	55° 1998	− 6 .6	+24 .8
12	55	10.1		9.5	54° 1927	+ 0 .5	−31 .3
13	60	10.3		9.5	55° 2004	+13 .2	+20 .1
14	68	10.5	10.61			−14 .5	− 1 .1
15	70	10.6				+15 .9	−11 .2
16	73	10.6	10.46			−15 .0	− 8 .2
17	75	10.7	10.84			+ 1 .6	− 3 .0
18	77	10.8				+23 .3	+20 .5
19	81	11.0	10.97			− 1 .4	−12 .2
20	81	11.0				− 2 .2	+13 .9
21	85	11.1				−11 .2	−15 .6
22	87	11.1				+ 8 .5	+15 .5
23	87	11.1				− 6 .7	+21 .3
24	88	11.1				−16 .7	−14 .7
25	91	11.2				+ 0 .5	+15 .1
26	92	11.3	11.25			−11 .2	−10 .2
27	93	11.3				−18 .6	+ 8 .6
28	95	11.3				+ 0 .2	−23 .0
29	95	11.3				+ 5′.3	+19′.6
30	96	11.3				+16 .0	+ 2 .1
31	96	11.3				− 8 .2	+16 .0
32	98	11.4				−10 .6	−27 .2
33	98	11.4				+17 .4	+ 2 .6
34	100	11.5				−10 .2	+16 .4
35	100	11.5				+15 .6	− 9 .7
36	102	11.5	$11^M.51$			− 0 .6	+ 3 .6
37	104	11.6				+13 .1	+ 9 .8
38	106	11.8				+11 .5	+ 9 .2
39	106	11.8				−14 .1	− 3 .6
40	109	12.0	11.98			+ 6 .1	+ 5 .6
41	109	12.0				+ 2 .0	− 4 .2
42	110	12.0				+ 0 .1	+12 .3
43	113	12.2				+ 8 .8	+11 .3
44	115	12.3				− 8 .2	+ 2 .5
45	115	12.3	12.37			− 2 .1	−11 .4
46	118	12.3	12.25			+ 0 .3	+ 6 .6
47	119	12.4	12.18			+ 3 .7	+ 5 .7
48	122	12.5				− 6 .2	+ 0 .4
49	124	12.6	12.59			− 3 .3	+ 4 .2
50	125	12.7				−10 .7	− 9 .4
51	127	12.9	13.04			− 4 .3	+ 1 .6
52	128	13.0				+ 8 .1	+12 .0
53	129	13.0				+ 0 .5	− 9 .6
54	131	13.1				+ 2 .8	+10 .1
55	134	13.2				− 0 .6	− 8 .6
56*		var			54° 1927[a]	0 .0	0 .0
57*		var			54° 1925	− 6 .5	−12 .3

56* V $9\frac{1}{2}^M$ — 14^M 6^C
57* UW 7^M — $7\frac{1}{2}^M$ 7^C

180565 & 180666

W & X Draconis

18^h 6^m 4^s (1855.0) **+66° 2'.0**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	7.2		$6^M.8$	65° 1240	− 6'.4	−19'.8
2*	8	7.3		7.1	66° 1087	+34.1	+ 4.6
3*	20	7.6		7.0	65° 1233	−29.7	− 5.7
4*	32	8.0	$8^M.05$	7.5	65° 1245	+ 4.6	−10.1
5	47	8.7	8.69	8.5	65° 1232	−33.6	− 8.5
6	59	9.0		8.8	65° 1236	−13.0	−34.9
7	67	9.2		8.7	65° 1237	−12.1	−19.8
8	68	9.3		8.7	65° 1250	+37.7	− 4.4
9	69	9.3		9.0	66° 1088	+39.7	+ 3.8
10	76	9.4		9.0	66° 1074	−17.6	+17.6
11	81	9.5	9.63	9.0	65° 1242	− 3.1	−11.3
12	86	9.5	9.38	9.0	65° 1243	+ 1.3	−14.6
13*	92	9.6	9.49	9.4	66° 1083	+11.2	+ 1.7
14	97	9.8		9.3	66° 1080	+ 5.4	+19.3
15	100	10.0		9.4	66° 1086	+30.2	+ 3.8
16	101	10.0		9.3	66° 1073	−17.9	+25.3
17	105	10.2	10.20			− 4.7	−10.9
18	113	10.4				−21.0	− 4.5
19	113	10.4		9.4	66° 1070	−28.0	+18.5
20	126	10.7	10.70			+ 3.9	−13.7
21	127	10.7				+10.2	+28.7
22	128	10.7		9.5	66° 1071	−24.3	+ 9.7
23	128	10.7				+29.3	+15.3
24	135	10.9		9.5	66° 1084	+19.3	+ 9.5
25	135	10.9	10.99	9.5	65° 1244	+ 2.8	− 2.1
26*	138	10.9	10.84			−10.4	− 4.3
27	139	11.0				−24.1	+ 9.1

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
28*	140	11.0	$11^M.16$			−10'.6	− 3'.2
29	141	11.0	10.84	$9^M.5$	66° 1079	+ 4.3	+ 6.3
30	141	11.0	10.99			+ 6.5	− 3.2
31	145	11.3	(11.92)			+ 4.2	+11.0
32	147	11.4		9.5	66° 1069	−28.6	+16.1
33	147	11.4	11.59			+ 4.5	− 1.4
34	154	11.6	11.38			− 5.6	− 0.2
35	159	12.0	11.99			− 2.0	−12.4
36	164	12.2				+ 9.0	+ 2.6
37	166	12.3				− 0.3	+ 8.3
38	168	12.4	12.38			+ 5.6	+ 5.3
39	170	12.5				+ 3.4	+11.2
40	173	12.6				− 6.5	+12.6
41	173	12.6				+ 5.5	− 4.1
42	179	12.9	12.92			+ 5.0	+ 6.8
43	183	13.0				+ 0.5	− 3.1
44	186	13.1				− 9.0	+ 1.1
45	186	13.1				− 3.8	+ 9.9
46	188	13.2	13.15			− 8.2	− 6.5
47	191	13.3				− 0.3	− 1.2
48	194	13.4				− 9.9	− 5.3
49	209	14.1				+ 7.3	− 0.8
50	214	14.3	(14.72)			− 7.6	− 3.4
51	224	14.8				+ 3.9	+ 5.5
52*		var			65° 1241a	− 4.1	− 5.9
53*		var			66° 1078a	+ 4.0	+ 5.9

1* HA 24 $7^M.70$ PD $7^M.36$
2* HA 45 7.34 PD 7.55
3* HA 45 7.64 PD 8.00 Bu 8357
4* HA 45 7.72 PD 8.20
13* Graff: var?

26* + 28* = BD + 65° 1238, $9^M.5$
52* W $8\frac{1}{2}^M$ — $14\frac{1}{2}^M$
53* X 9^M — 14^M

181136

W Lyrae

$18^{h}\ 9^{m}\ 54^{s}$ (1855.0) +36° 37'.6

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1	0	7.9		$8^{\mathrm{M}}1$	36° 3079	+21'.5	+21'.3
2	8	8.1	$8^{\mathrm{M}}.25$	8.3	36° 3067	+ 4.5	+ 6.0
3	11	8.2	7.96	8.1	36° 3064	− 1.1	−17.4
4	32	8.8		8.7	36° 3076	+16.1	−15.0
5	34	8.8		8.5	36° 3062	−10.1	−28.8
6	38	8.9		8.5	37° 3051	−11.3	+29.7
7	38	8.9	8.94	8.6	36° 3059	−13.4	− 2.8
8	41	9.1		9.4	36° 3072	+11.5	−15.1
9	44	9.2		9.0	36° 3069	+ 6.9	−22.2
10	47	9.3		9.0	36° 3057	−17.1	+18.3
11	50	9.4		9.0	36° 3054	−22.8	+18.1
12	53	9.5		9.5	36° 3077	+20.2	−18.1
13	55	9.6		9.2	36° 3081	+31.3	−13.6
14	56	9.6		9.1	36° 3052	−28.0	+16.7
15	56	9.6		8.9	36° 3078	+21.2	−17.8
16	59	9.7	9.71	9.3	36° 3058	−16.2	+ 1.6
17	63	9.8		9.3	36° 3071	+ 9.6	+18.2
18	65	9.8		9.3	36° 3080	+27.9	+22.5
19	67	9.8		9.3	36° 3075	+15.0	+22.9
20	72	9.9	10.03	9.3	36° 3065	− 0.9	− 6.0
21	74	9.9	9.85	9.4	36° 3063	− 6.2	− 3.8
22	76	10.0	9.95	9.4	36° 3073	+11.8	− 0.9
23	77	10.0				+ 0.3	−13.2
24	80	10.1		9.4	36° 3051	−30.0	+ 3.7
25	82	10.2		9.5	36° 3056	−17.8	−14.2
26	83	10.2				−28.7	+12.2
27	84	10.2		9.4	36° 3068	+ 6.1	−27.1
28	86	10.3				+14.4	+ 9.6
29	93	10.6	10.60	9.5	36° 3060	−12.4	− 0.9
30	93	10.6		9.5	37° 3059	+10.8	+24.9
31	96	10.6				+ 6.4	+21.5
32	101	10.7		9.4	36° 3070	+ 7.8	+16.6
33	105	10.7	$10^{\mathrm{M}}.75$			+13'.2	− 6'.4
34	107	10.8		$9^{\mathrm{M}}.5$	36° 3061	−10.3	−12.7
35	109	10.8	10.63			+10.7	+ 3.0
36	110	10.9				+ 7.9	+11.4
37	111	10.9	10.93			− 8.1	+ 5.5
38	113	11.0				−12.6	− 9.0
39	116	11.1				−14.4	−15.1
40	118	11.2	11.16			− 2.9	−10.7
41	121	11.3				+ 9.4	−15.7
42	123	11.4				+ 9.6	−11.5
43	131	11.8				+ 5.6	+10.3
44	133	11.9				+11.7	+10.7
45*	135	12.0				− 3.5	−13.3
46*	135	12.0				−11.1	−13.0
47	137	12.1	12.08			− 0.8	− 0.7
48	140	12.1				−16.1	− 6.3
49	142	12.2				−13.6	− 6.6
50	147	12.3	12.43			− 4.9	− 0.2
51	151	12.4	12.27			− 2.1	− 1.6
52	155	12.7				− 1.6	− 4.4
53	158	13.0	13.12			+ 2.2	0.0
54	159	13.0				− 4.1	+ 3.7
55	161	13.1				− 3.0	+ 0.7
56	164	13.1	13.03			+ 0.5	− 1.4
57	166	13.2				+ 1.2	− 1.6
58	173	13.4				+ 1.7	− 2.5
59	177	13.5				− 2.3	+ 4.8
60	178	13.5				− 2.4	+ 1.1
61		13.3	13.28			− 6.4	− 0.4
62*		var			36° 3066	0.0	0.0

45*, 46* dpl
62* W $7\frac{1}{2}^{\mathrm{M}} - 12\frac{1}{2}^{\mathrm{M}}$

182416

SS Sagittarii

$18^h\ 22^m\ 2^s$ (1855.0) **$-16^\circ\ 59'.5$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		7.2		$7^{M}.3$	16° 4922	+37′.5	+19′.9
2	0	8.5	$8^{M}.56$	8.5	16° 4907	+ 8.0	+19.4
3	5	8.6	8.54	8.3	16° 4900	−11.5	+15.4
4	11	8.7		8.7	17° 5207	−27.1	− 4.7
5	14	8.7		8.3	16° 4888	−28.9	+11.9
6	19	8.9		9.0	17° 5220	+ 6.0	−21.8
7	20	8.9		8.9	16° 4905	+ 1.6	+15.7
8	27	9.1		9.6	16° 4892	−24.6	+ 4.0
9	28	9.1	9.10	9.1	16° 4918	+29.4	+ 6.8
10	34	9.3		9.0	17° 5213	−13.2	−27.3
11	38	9.4		9.1	17° 5227	+22.0	−20.5
12	40	9.4	9.39	9.0	16° 4902	− 8.4	+11.0
13	44	9.5	9.54			+23.9	+ 5.3
14	47	9.6		9.1	17° 5210	−22.6	−13.0
15	50	9.7		9.2	17° 5218	+ 4.0	−19.8
16	52	9.7		9.2	16° 4895	−17.2	+ 7.7
17*	55	9.8	9.80	9.1	17° 5225	+18.8	− 3.9
18	64	10.1	10.10	9.4	17° 5222	+12.2	− 9.1
19	64	10.1		9.2	17° 5208	−26.8	− 2.6
20	66	10.1		9.8	17° 5226	+21.7	−10.7
21	74	10.2				−24.1	−17.2
22	75	10.2		9.5	17° 5209	−25.2	−17.8
23	78	10.2	10.23	9.4	17° 5214	− 1.4	−10.1
24	82	10.3		9.8	17° 5212	−22.1	−11.4
25	86	10.3		9.7	17° 5217	+ 3.2	−13.1
26*	87	10.3				+30.9	− 2.8
27	88	10.3				−29.0	+11.6
28	88	10.3				−18.4	−10.6
29	88	10.3				+14.2	−20.1
30	88	10.3		9.8	16° 4890	−26.9	+ 2.5
31	88	10.3	10.31	9.7	17° 5215	+ 0.6	− 2.0
32	89	10.4		9.5	16° 4913	+24.8	+ 3.5
33	91	10.4				+13.9	+ 6.5
34	94	10.5				+16′.5	+13′.0
35	94	10.5				+ 8.1	−23.8
36*	99	10.6				+31.0	− 2.7
37	99	10.6				+ 3.9	−18.5
38*	(102)	(10.7)				+16.2	+ 4.0
39	104	10.7				+15.5	+ 9.2
40	107	10.8				+ 2.0	+ 9.9
41	109	10.8				+ 2.1	+14.0
42	114	10.9				+ 3.5	+ 6.3
43	117	11.0				− 3.5	− 7.2
44	118	11.0				+13.4	−11.2
45	120	11.1	$10^{M}.94$			− 1.6	+ 2.2
46	121	11.1	11.26			− 2.3	− 2.2
47	121	11.1				−25.1	+ 4.6
48	125	11.2				+ 2.7	− 0.7
49	130	11.3	11.33			− 4.5	+ 5.7
50	133	11.5				+15.2	+ 0.4
51	133	11.5	11.47			− 0.5	− 0.8
52	136	11.5				+ 0.3	−14.4
53	137	11.6				+ 3.3	+ 7.0
54	140	11.7				− 5.5	− 5.6
55	142	11.7				+ 9.5	+ 2.4
56	147	11.9				+15.9	−14.6
57	151	12.0				+ 9.3	+ 3.3
58	152	12.0				− 3.2	−11.8
59	153	12.1				+ 7.5	+ 1.3
60	168	12.5				+ 2.4	+ 2.8
61*	(178)	(12.8)				− 2.2	− 3.1
62*	(180)	(12.9)				− 2.0	− 1.0
63	183	13.0	12.98			− 1.8	+ 1.4
64	190	13.2				− 3.3	− 2.7
65*		var			16° 4904	0.0	0.0

1* HA 45 $7^{M}.16$
17* Bu 8606
26* + 36* = BD − 17° 5230, $9^{M}.3$

38*, 61*, 62* dpl
65* SS 8^{M} — $10\frac{1}{2}^{M}$

183225

RZ Herculis

$18^h\ 30^m\ 55^s$ (1855.0) **+25° 55′.8**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		6.7		$6^M.9$	26° 3324	+48′.3	+ 4′.6
2	0	8.4		7.7	26° 3319	+37.7	+32.1
3	6	8.6		8.4	25° 3581	−11.3	−20.5
4	10	8.8		8.5	25° 3594	+37.8	−10.2
5	11	8.8		8.4	26° 3320	+38.5	+ 8.2
6	16	9.0	$9^M.04$	8.9	26° 3306	− 4.4	+ 6.9
7	17	9.1		9.1	26° 3297	−25.7	+10.7
8	20	9.2		9.2	26° 3311	+12.8	+21.2
9	28	9.5		9.1	26° 3314	+22.7	+20.9
10	29	9.5		9.1	26° 3318	+28.6	+22.4
11	32	9.6		9.0	25° 3579	−11.8	− 8.0
12	35	9.7		9.2	26° 3310	+10.2	+31.2
13	38	9.8	9.82	9.3	26° 3308	+ 3.0	+ 6.7
14	42	9.9		9.3	26° 3302	−21.3	+12.7
15	43	10.0		9.5	25° 3582	− 1.2	−20.2
16	47	10.1		9.5	25° 3580	−12.1	−23.0
17	48	10.1		9.5	26° 3299	−23.5	+20.8
18	48	10.1	(9.99)			− 8.3	+ 4.3
19	48	10.1				−13.3	−16.6
20	48	10.1				−12.0	−21.3
21	53	10.3				− 1.3	−15.6
22	54	10.4		9.4	25° 3587	+11.4	− 6.0
23	56	10.5				+18.5	− 5.6
24	56	10.5		9.5	25° 3576	−16.6	−25.4
25	56	10.5		9.3	25° 3577	−16.6	− 8.5
26	61	10.7	10.70			+ 1.6	+ 8.3
27	64	10.9	11.07			− 8.5	+ 2.5
28	64	10.9				−21.8	+14.2
29	65	10.9	10.87			+ 6.5	+10.7
30	67	11.0				−11.6	− 2.6
31	68	11.1	11.03			+ 7.5	+ 5.8
32	73	11.3	11.32			−10.2	+ 6.4
33	74	11.4	11.52			− 1.6	+ 4.6
34	78	11.5				− 7.2	− 5.2
35	78	11.5				+ 1.7	−11.5
36	78	11.5				+ 3.1	+ 5.9
37	78	11.5				−12.7	− 1.0
38	81	11.6				−12.8	− 1.3

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
39	81	11.6				+ 5′.6	+ 6′.3
40	82	11.6				+ 0.6	− 5.1
41	83	11.6				− 7.1	− 1.4
42*	83	11.6	$11^M.47$			+ 0.2	−10.0
43	83	11.6				+ 7.2	+ 8.5
44	83	11.6				+ 5.0	− 5.3
45	84	11.7				+ 0.5	− 0.6
46	85	11.7				+ 2.3	+ 6.9
47	86	11.7				+12.5	− 5.7
48	87	11.8	11.88			− 0.5	− 1.1
49	89	11.9				− 7.1	− 3.1
50	94	12.1				+ 5.7	+ 1.1
51	94	12.1	12.01			+ 1.5	+ 0.4
52	95	12.2	12.27			+ 1.0	− 1.4
53	96	12.2				+ 5.1	− 1.8
54	96	12.2				− 7.5	− 3.0
55	97	12.3				− 8.2	− 1.3
56	97	12.3				+ 9.7	− 0.3
57	98	12.3				+ 4.0	− 3.9
58	101	12.5				+ 8.1	+ 0.4
59	101	12.5				+ 0.4	− 0.4
60	102	12.6				+ 7.0	+ 0.8
61	103	12.6	12.65			+ 1.1	− 2.7
62	103	12.6				+ 3.7	− 1.3
63	103	12.6				+ 0.2	− 7.2
64	106	12.8				+ 6.5	− 2.5
65	109	12.9				+ 4.8	− 4.2
66*	111	13.0				+ 5.8	− 1.8
67	113	13.0				+ 3.4	− 3.1
68	113	13.0				− 5.2	− 0.9
69*	116	13.1				− 3.1	− 3.1
70	117	13.2				+ 4.2	+ 2.4
71	119	13.3				− 4.9	− 0.2
72	127	13.6	13.58			− 0.6	+ 0.3
73		13.2	13.24			+ 0.7	+ 5.3
74		(14.0)	(14.05)			− 1.3	− 0.8
75*		var			25° 3582a	0.0	0.0

1* HA 45 $6^M.74$ PD $7^M.11$

42*, 66*, 69* dpl

75* RZ $9\frac{1}{2}^M$ — 14^M

185634

Z Lyrae

18h 54m 22s (1855.0) **+34° 45′.3**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
1*	0	7.4		$7^{\mathrm{M}}.6$	34° 3368	−30′.7	− 5′.5	34	104	10.7			+ 3′.7	−18′.4
2	25	8.5		8.2	35° 3448	+19 .1	+27 .8	35	105	10.7			−25 .0	− 2 .2
3	29	8.7	$8^{\mathrm{M}}.69$	8.6	34° 3375	−13 .5	+ 9 .9	36	107	10.8	$10^{\mathrm{M}}.80$		− 1 .8	− 3 .5
4	32	8.8		8.8	34° 3372	−20 .1	−29 .4	37	108	10.8			− 9 .8	− 9 .8
5	38	8.9		8.7	34° 3367	−31 .6	− 1 .0	38	110	10.9			−26 .2	− 3 .1
6	38	8.9		8.5	34° 3396	+27 .1	− 9 .0	39	112	11.0			− 1 .5	+10 .2
7	38	8.9		8.5	34° 3392	+18 .6	−18 .4	40	116	11.2	11.24		−10 .5	− 0 .5
8	43	9.1		8.7	34° 3393	+20 .6	−27 .6	41	118	11.3			−11 .4	+ 6 .9
9	47	9.2		9.2	35° 3417	−29 .2	+17 .6	42	122	11.4			+ 1 .4	+12 .0
10	48	9.2	9.19	8.9	34° 3387	+ 7 .1	− 9 .0	43	125	11.5			−15 .0	− 7 .0
11	52	9.3		9.0	34° 3366	−33 .1	−10 .1	44	127	11.5			− 3 .5	+10 .7
12	56	9.5		9.1	35° 3442	+ 6 .7	+26 .3	45	129	11.6			+12 .8	+ 2 .7
13	59	9.6	9.76	9.1	34° 3388	+ 7 .8	+ 4 .1	46	130	11.6			− 6 .1	+10 .9
14	60	9.7		9.2	34° 3370	−22 .4	− 2 .6	47	132	11.6			+ 8 .1	− 3 .5
15	60	9.7	9.49	9.4	34° 3376	−12 .5	− 6 .1	48	134	11.7	11.70		− 3 .1	− 3 .4
16	64	9.9	9.90	9.1	34° 3389	+ 8 .7	− 4 .7	49	134	11.7			− 4 .5	+ 6 .5
17	70	10.0		9.3	34° 3394	+23 .3	+11 .3	50	136	11.8			− 7 .2	− 1 .2
18	71	10.0		9.3	34° 3398	+29 .1	−23 .1	51	137	11.9			+ 7 .2	+11 .0
19	72	10.0	9.97	9.5	34° 3380	− 8 .1	− 5 .5	52	140	12.1	12.21		+ 5 .0	+ 2 .6
20	73	10.0	9.90	9.4	34° 3379	− 8 .2	− 9 .4	53	141	12.2	12.06		+ 6 .0	+ 2 .9
21	76	10.1	10.11	9.4	34° 3385	+ 3 .3	− 0 .9	54	143	12.4			− 3 .5	− 1 .2
22*	79	10.2				−19 .7	−27 .1	55	145	12.8	11.77		−10 .9	− 7 .3
23	82	10.4	10.40	9.5	34° 3382	− 5 .0	− 9 .0	56	146	13.0	12.97		+ 3 .2	+ 0 .2
24	85	10.4		9.5	34° 3377	−11 .0	+ 3 .8	57	147	13.1			+11 .7	+ 6 .5
25	85	10.4		9.4	34° 3397	+27 .7	+ 5 .3	58	148	13.2			+ 0 .1	− 3 .6
26*	87	10.5				−19 .7	−27 .4	59	151	13.4			− 4 .6	−12 .6
27	89	10.5				+14 .1	+ 9 .1	60	153	13.5	13.52		− 0 .3	+ 1 .6
28	89	10.5	10.55	9.5	34° 3378	−10 .5	−10 .8	61*	155	13.6			− 7 .3	+ 4 .5
29	91	10.6				−27 .1	− 3 .3	62	157	13.7	}13.48		+ 0 .3	+ 0 .2
30	94	10.6		9.5	34° 3381	− 7 .0	+12 .7	63	160	13.9			+ 0 .3	0 .0
31	97	10.6		9.5	34° 3384	+ 1 .3	−18 .1	64	(170)	14.3	14.34		− 0 .6	+ 0 .6
32	97	10.6				+ 6 .9	− 9 .8	65		13.4	13.42		+ 6 .8	+ 2 .3
33	101	10.7				−27 .2	+12 .1	66*		var		34° 3382^{a}	0 .0	0 .0

1* HA 24 $7^{\mathrm{M}}.37$

22* + 26* = BD + 34° 3373, $9^{\mathrm{M}}.3$

61* dpl

66* Z $9\frac{1}{2}^{\mathrm{M}}$ — $14\frac{1}{2}^{\mathrm{M}}$

185737

RT Lyrae

$18^h\ 56^m\ 13^s$ (1855.0) **+37° 19′.0**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	7.7		$7^M.8$	37° 3315	+11′.1	+17′.3
2*	3	7.8		7.7	37° 3307	−10.1	+28.5
3*	16	8.2		8.1	36° 3372	− 0.2	−26.9
4*	23	8.4		8.4	37° 3310	+ 1.3	−12.2
5*	24	8.4		8.2	37° 3322	+23.4	−10.2
6*	29	8.5		8.8	36° 3358	−19.9	−26.1
7*	34	8.7		8.8	37° 3306	−14.1	− 8.7
8*	47	9.0		8.8	37° 3301	−25.9	−15.1
9*	59	9.4		9.5	37° 3319	+19.0	+ 7.3
10*	60	9.4		9.0	36° 3386	+27.7	−26.5
11*	64	9.5		9.5	37° 3298	−28.7	+ 0.5
12*	67	9.6		9.4	37° 3323	+26.3	+ 0.1
13*	67	9.6		9.4	37° 3297	32.4	+ 3.0
14*	70	9.7		9.5	37° 3326	+30.8	+24.3
15*	72	9.7		9.5	37° 3325	+30.3	+ 0.2
16*	75	9.8		9.5	36° 3375	+ 4.3	−24.8
17*	77	9.9		9.5	37° 3317	+15.7	+ 7.5
18*	77	9.9		9.4	36° 3351	−29.2	−28.7
19*	79	9.9		9.5	37° 3303	−18.3	−14.6
20*	80	10.0		9.4	37° 3302	−21.5	− 7.9
21*	86	10.1		9.5	36° 3356	−25.1	−25.3
22	88	10.2	$10^M.18$	9.5	37° 3311	+ 3.3	− 0.3
23	90	10.2		9.5	37° 3312	+ 3.9	+19.4
24	93	10.3		9.4	37° 3304	−14.8	+17.7
25	94	10.3		9.4	37° 3308	− 2.4	+22.4
26	94	10.3		9.5	37° 3316	+12.3	−13.5
27	95	10.4		9.5	37° 3313	+ 4.4	+20.0
28	95	10.4				−23.3	−23.5
29	97	10.4				+ 9.4	+19.5
30	99	10.5		9.5	36° 3373	+ 2.5	−22.5
31	99	10.5	10.47	9.5	37° 3309	− 1.8	+ 3.9
32	103	10.8		9.5	37° 3305	−14.2	+14.5
33	106	11.0	11.00			+ 8.9	− 1.5
34	108	11.1				−16.1	+ 8.6
35	111	11.2		9.5	37° 3300	−25.9	−16.3
36	111	11.2				+ 0.2	+15.7
37	111	11.2				− 3.3	+12.5
38	113	11.2				− 9.2	+ 3.1

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
39	113	11.2				+13′.1	− 8′.9
40	115	11.3				−25.9	− 2.0
41	116	11.3				− 5.0	−14.6
42	117	11.4				− 8.3	+ 2.4
43	119	11.4				−22.0	− 8.9
44	120	11.5				−12.6	+10.7
45	120	11.5				+ 8.3	− 8.4
46	122	11.5				− 2.2	+ 9.7
47	123	11.6				−11.5	+13.9
48	126	11.7				+ 4.0	+ 8.2
49	127	11.7				+ 8.9	+14.1
50	131	11.8	$11^M.82$			+ 2.8	+ 1.3
51	133	11.8				+14.0	+ 0.9
52	134	11.8				+ 6.3	−12.5
53	136	11.9				+ 7.9	+13.6
54	137	11.9	11.84			− 2.0	− 0.1
55	137	11.9				+10.4	+ 5.3
56	139	11.9				− 1.7	−11.9
57	140	11.9				+11.6	+ 3.3
58	141	12.0				+ 1.9	+12.1
59	141	12.0				+10.6	+ 9.1
60	143	12.0				+12.6	+ 7.5
61	145	12.0	12.00			− 1.6	− 3.0
62	147	12.1	12.12			+ 5.0	− 3.6
63	152	12.3	12.30			+ 2.1	− 2.8
64*	(152)	(12.3)				+ 1.9	− 8.7
65	153	12.3	12.29			+ 2.3	− 4.5
66	155	12.4				+ 5.8	− 0.7
67	157	12.5				+ 3.7	− 2.2
68	157	12.5	12.55			− 1.6	+ 2.8
69	164	12.8				+ 4.9	+ 3.9
70*	168	12.9				+ 4.9	+ 0.8
71		13.7	13.70			+ 0.5	+ 2.3
72		14.3	14.30			+ 1.4	− 0.5
73		(15)				+ 0.8	− 0.7
74*		var				0.0	0.0

1*—21* magnitudines stellarum minus certae

64*, 70* dpl

74* RT $9^1/_2{}^M$ — 14^M

V (& VZ) Lyrae

19h 3m 24s (1855.0) **+29° 25′.7**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*	0	7.5		7^M.7	29° 3506	+32′.0	+13′.8	41	78	10.7		9^M.5	28° 3224	+17′.6	−28′.1
2	9	7.7		8.4	29° 3489	− 2.4	+23.6	42	81	10.7				+13.3	− 5.5
3	13	7.7		8.2	29° 3496	+ 6.1	−18.0	43	86	10.8	10^M.60			− 4.8	−12.0
4	17	7.8	7^M.82	8.4	29° 3490	− 1.6	+17.8	44	86	10.8				0.0	+14.0
5	20	8.0	7.97	8.1	29° 3492	− 0.7	+15.2	45	90	11.0				− 3.0	− 9.4
6	23	8.2		8.0	28° 3186	−42.3	−32.2	46	97	11.3				− 8.3	−14.0
7	27	8.5		9.2	29° 3497	+ 6.2	+25.0	47	100	11.4	11.39			− 9.6	− 3.9
8	29	8.7		8.7	29° 3488	− 3.7	−17.6	48	100	11.4				+ 3.6	−11.9
9*	31	8.9				−15.3	+ 8.7	49	105	11.5				+ 7.1	+ 6.5
10	34	9.1	9.25	9.2	29° 3485	−13.8	− 9.3	50	106	11.5				− 0.7	− 6.5
11*	36	9.2						51	106	11.5				+ 9.6	+ 9.9
12	37	9.2		8.9	29° 3484	−15.1	+20.2	52	107	11.6	11.56			− 5.4	− 0.9
13	37	9.2	9.17	9.0	29° 3482	−16.3	−12.1	53	107	11.6				+ 9.9	+ 7.4
14*	42	9.3	9.32	9.1	29° 3491	− 1.1	+25.0	54	107	11.6				− 8.3	+ 2.3
15	42	9.3	9.30	9.4	29° 3481	−18.8	−10.1	55	108	11.6				+ 7.5	+ 5.0
16	44	9.4		9.4	29° 3505	+29.5	+27.4	56	108	11.6				+10.1	− 9.1
17	44	9.4		9.2	29° 3498	+ 8.8	+12.4	57	117	12.0				− 9.4	+ 1.6
18	46	9.5		9.2	29° 3499	+ 8.7	+28.4	58	117	12.0	12.12			− 1.4	+ 3.8
19	46	9.5		9.3	29° 3504	+28.5	+29.5	59	120	12.1				+ 3.2	− 7.0
20	46	9.5		9.5	29° 3507	+32.2	+11.0	60	121	12.1				− 0.4	+ 4.6
21	47	9.5		9.5	29° 3503	+24.0	−25.2	61	123	12.2				+ 5.7	+ 4.3
22	50	9.7				+26.4	+15.4	62	123	12.2				+ 7.6	− 9.1
23	54	9.8		9.5	29° 3495	+ 5.9	−20.0	63*	124	12.3				− 3.9	+ 1.7
24	55	9.9		9.3	29° 3502	+22.6	+21.3	64*	126	12.4				− 8.6	− 4.5
25	55	9.9	9.91	9.2	29° 3486	− 9.9	−11.9	65	127	12.4	12.22			+ 5.7	+ 1.3
26	58	10.0				−14.3	+ 7.4	66	130	12.6				+ 4.4	− 8.1
27	60	10.0				− 0.8	+26.8	67	130	12.6				− 1.4	− 7.7
28	60	10.0		9.5	29° 3501	+21.0	+ 7.9	68	132	12.7	12.92			+ 3.6	+ 2.1
29	60	10.0	9.96	9.3	29° 3493	0.0	− 9.7	69	136	12.9				+ 5.2	− 9.5
30	63	10.2				+21.5	− 0.7	70	138	13.0	12.79			+ 4.7	+ 0.7
31	65	10.3				−21.7	−22.5	71	142	13.2				+ 4.2	− 1.8
32	71	10.5		9.5	29° 3500	+17.7	−11.0	72	145	13.4				+ 3.4	− 5.3
33*	72	10.5		9.5	29° 3487	− 6.0	−22.6	73*	152	13.7	13.74			+ 1.8	− 0.5
34	72	10.5				−18.5	− 7.5	74	154	13.8				+ 0.2	+ 2.9
35*	72	10.5				−16.6	−10.8	75	158	14.0				+ 3.2	− 8.1
36	73	10.6				+17.2	− 1.6	76*	160	14.1				+ 1.9	− 6.2
37	73	10.6				+22.8	−14.7	77		(15.0)	(15.04)			− 0.2	+ 0.6
38	73	10.6		8.6	28° 3198	−27.9	−27.1	78*		var				0.0	0.0
39	75	10.6	10.83	9.5	29° 3494	+ 0.4	− 8.3	79*		var				+ 2.9	− 6.5
40	76	10.6				−17.0	− 8.3								

1* HA 74 7^M.56
9* + 11* = BD + 29° 3483, 8^M.0 = Bu 9056
14* var? AN 159, 266
33*, 35* dpl

63*, 64*, 73*, 76* dpl
78* V 9^M — < 15^M
79* VZ 10½^M — 16^M

190819a & 190818

RW & RX (& BH) Sagittarii

19^h 5^m 45^s (1855.0) **-19^0 4′.8**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		5.0		$5^M.3$	19° 5379	+48′.3	− 7′.4
2	0	8.0		8.3	19° 5344	−21 .2	−23 .6
3	5	8.3	$8^M.28$	8.7	19° 5353	+ 7 .3	− 8 .4
4	6	8.4		8.5	18° 5276	+27 .6	+10 .8
5	13	8.8	8.85	9.0	19° 5346	−11 .7	− 0 .9
6	15	8.9		9.1	18° 5281	+30 .9	+ 6 .5
7	20	9.2		9.3	19° 5357	+18 .1	−31 .9
8*	24	9.4		9.2	18° 5251	−12 .2	+16 .3
9	24	9.4		9.2	18° 5249	−22 .6	+24 .6
10	26	9.4		9.0	18° 5267	+ 8 .7	+19 .6
11	33	9.7		9.4	18° 5274	+22 .2	+ 9 .2
12	36	9.9		9.4	18° 5258	− 2 .7	+17 .5
13	37	9.9		9.5	19° 5341	−23 .1	−24 .4
14	38	10.0		9.4	19° 5343	−21 .6	−27 .3
15	40	10.0	10.04	9.5	19° 5349	− 3 .8	− 5 .8
16	44	10.1		9.5	19° 5351	− 0 .3	−27 .3
17	47	10.2				− 1 .4	−10 .4
18	52	10.4		9.5	18° 5252	−11 .5	+25 .9
19	53	10.4				+ 7 .2	− 9 .8
20	54	10.4	10.43	9.8	18° 5256	− 6 .9	+ 9 .6
21	57	10.6		9.5	19° 5355	+16 .8	−21 .7
22	58	10.6				+ 1 .8	+21 .0
23	59	10.6		9.7	18° 5261	+ 1 .4	+19 .1
24	59	10.6				− 6 .0	+15 .6
25	61	10.7				+ 1 .5	+20 .8
26	62	10.8	10.77			− 2 .4	+10 .2
27	64	10.9				− 5 .9	−15 .1
28	64	10.9		9.8	19° 5359	+24 .2	−20 .1
29	68	11.2	11.24			− 4 .5	+ 7 .2
30	70	11.3		9.8	19° 5362	+29 .7	− 5 .0
31	72	11.4	11.41			+ 8 .5	+ 4 .0
32	74	11.5				+22 .2	−23 .9
33	75	11.5				+20 .3	−27 .3
34	76	11.5				− 1 .9	+ 7 .1
35	78	11.6	11.62			+ 6 .1	− 3 .5
36	80	11.7				+ 1 .0	− 8 .3
37	82	11.8	11.75			− 2 .7	+ 1 .6

1* HR $5^M.03$
8* var?

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
38	84	11.8				+ 7′.7	− 4′.3
39	85	11.9				+12 .9	− 0 .2
40	86	11.9				+ 8 .7	+ 3 .7
41	86	11.9				+ 8 .4	− 2 .0
42	86	11.9				+13 .7	− 0 .9
43	87	12.0				− 5 .3	− 5 .5
44	88	12.0	$12^M.08$			+ 7 .4	+ 1 .7
45	89	12.0				+ 6 .3	− 5 .3
46	90	12.1				+ 0 .6	− 1 .0
47	90	12.1				+ 0 .2	− 0 .8
48	91	12.1	12.02			− 0 .2	− 3 .3
49	91	12.1				− 0 .6	+ 8 .6
50	95	12.2				+ 2 .3	+ 7 .0
51	97	12.3				+ 0 .3	− 6 .6
52	101	12.5				− 5 .8	+ 2 .4
53	101	12.5				− 4 .2	− 4 .6
54	103	12.6				+ 1 .8	+ 2 .6
55*	107	12.8				+ 2 .4	+ 4 .8
56	109	12.9				− 2 .8	− 0 .7
57	110	13.0				+ 1 .6	− 0 .5
58	113	13.1				− 0 .9	− 7 .8
59	113	13.1	13.11			+ 6 .6	+ 1 .2
60	115	13.3	13.38			+ 9 .0	+ 2 .0
61*	115	13.3				+ 4 .3	− 0 .1
62*	115	13.3				− 1 .2	− 1 .5
63*	117	13.4				+ 1 .9	− 2 .0
64	117	13.4				+ 2 .3	− 0 .3
65	118	13.4				− 3 .3	− 4 .5
66	119	13.5				+ 0 .9	+ 2 .3
67*	121	13.6				+ 3 .7	− 2 .4
68*	121	13.6				+ 4 .0	+ 1 .0
69	124	13.7				+ 3 .1	− 0 .2
70	124	13.7				− 2 .2	− 4 .2
71*		var			19° 5347	− 4 .5	− 1 .4
72*		var				+ 3 .1	+ 0 .8
73*		var				+ 4 .5	+ 1 .5

55*, 61*—63*, 67*, 68* dpl
71* RW 9^M — 11^M
72* BH $12^1/_2{}^M$ — $13^1/_2{}^M$
73* RX 9^M — < $13^1/_2{}^M$

190941

RU Lyrae

19^h 7^m 37^s (1855.0) **$+41^{\circ}$ $3'.7$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	7.1		$7^{M}.2$	41° 3253	−19′.5	+43′.4
2*	9	7.3		7.2	40° 3624	− 0.8	− 3.9
3*	21	7.7		8.0	41° 3257	−15.3	+28.5
4	30	8.0		7.8	41° 3264	− 1.9	+32.1
5	43	8.5		8.5	41° 3273	+22.7	+ 0.1
6	46	8.6		8.6	41° 3275	+23.7	− 2.7
7	48	8.7		8.0	41° 3271	+17.0	+26.2
8	52	8.9		8.9	40° 3628	+ 5.6	−23.3
9	55	9.0	$9^{M}.08$	8.9	41° 3270	+15.4	+ 4.0
10	57	9.1	8.94	8.8	41° 3261	− 5.1	+ 4.5
11*	60	9.2		8.8	41° 3254	−18.5	+18.0
12	62	9.3		9.1	41° 3260	− 6.5	+11.7
13	63	9.3		9.0	41° 3251	−22.7	+13.0
14	63	9.3		8.8	40° 3631	+11.3	−34.4
15	69	9.6		9.1	40° 3611	−28.0	−24.5
16	71	9.7		9.3	40° 3623	− 0.7	−25.5
17	71	9.7		9.2	41° 3250	−25.2	+20.8
18	73	9.8	9.77	9.4	41° 3268	+ 9.0	− 0.3
19	74	9.8		9.3	40° 3630	+ 7.4	−20.6
20	76	10.0		9.3	41° 3279	+28.7	+ 6.4
21	77	10.0		9.3	41° 3277	+26.5	+ 7.7
22	80	10.2		9.5	41° 3272	+22.4	+ 7.5
23	81	10.3		9.4	40° 3618	−16.7	−11.7
24	82	10.3		9.4	41° 3280	+29.4	+ 6.9
25	85	10.5		9.3	41° 3259	− 7.0	+10.8
26	87	10.6	10.71	9.4	41° 3266	+ 6.6	+ 4.2
27	90	10.6				− 7.8	+11.4
28	94	10.7	10.69	9.5	40° 3621	−10.8	− 5.3

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
29	95	10.7	$10^{M}.63$	$9^{M}.5$	40° 3619	−12′.6	− 3′.9
30	97	10.8				− 5.0	+11.4
31	99	10.8				−14.2	+13.1
32	101	10.9				+ 2.4	−12.8
33	104	10.9	10.84			+14.4	+ 8.9
34	108	11.0				+12.0	−11.9
35	112	11.2				+ 3.3	+13.6
36	113	11.2	11.27			− 2.1	− 5.8
37	116	11.3	11.26	9.5	41° 3258	− 7.5	− 0.6
38	116	11.3				+ 6.4	+ 4.5
39	118	11.4				−15.1	− 5.6
40	120	11.5				−10.4	− 9.2
41	120	11.5				+ 9.4	− 2.7
42	123	11.8	11.77			− 4.9	+ 1.3
43	123	11.8				+12.4	+12.3
44	124	11.9				− 7.1	− 4.2
45	125	12.0	12.05			+ 0.2	+ 1.7
46	127	12.3				− 7.6	+ 4.1
47	127	12.3				− 9.4	+ 1.0
48*	127	12.3	12.29			+ 0.7	+ 2.7
49	128	12.4				− 4.5	+ 5.6
50	130	12.8				− 7.4	− 3.9
51	132	13.1				+ 1.3	+ 5.3
52	132	13.1				+ 5.9	0.0
53*	135	13.6	13.59			+ 0.7	+ 3.6
54	138	14.0				+ 5.2	− 0.8
55	141	14.3				+ 1.5	+ 5.8
56*		var			41° 3264^{a}	0.0	0.0

1* HA 45 $7^{M}.13$ PD $7^{M}.18$
2* HA 45 $7^{M}.33$ PD $7^{M}.23$
3* Bu 9113
11* Bu 9110

48* dpl
53* dpl
56* RU 10^{M} — $13^{1}/_{2}{}^{M}$

190967

U Draconis

19^h 9^m 54^s (1855.0) **+67° 2′.1**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		3.2		$3^M.4$	67° 1129	+14′.8	+22′.8
2*	0	6.9		7.5	66° 1179	+23 .4	− 9 .9
3	10	7.4		8.2	66° 1184	+37 .1	− 8 .7
4	17	7.8		8.2	66° 1172	+ 7 .1	−15 .8
5	19	8.0	$7^M.97$	8.0	66° 1169	− 4 .7	− 9 .2
6	27	8.6		8.9	67° 1127	+ 5 .2	+14 .7
7	27	8.6	8.59	8.6	67° 1117	−14 .2	+ 3 .2
8	31	8.8		9.1	67° 1130	+15 .6	+18 .4
9	33	9.0		8.8	67° 1114	−18 .7	− 2 .2
10	35	9.1		9.2	66° 1167	− 6 .8	−23 .7
11	38	9.3	9.24	9.2	67° 1120	−10 .6	+ 3 .3
12	39	9.4	9.52	8.9	67° 1118	−11 .6	+ 8 .1
13	41	9.5		9.4	66° 1178	+23 .0	−23 .0
14	44	9.7		9.4	66° 1174	+12 .6	−16 .9
15	46	9.8		9.3	66° 1164	−12 .2	−14 .7
16	48	9.9		9.3	66° 1163	−13 .4	−18 .6
17	50	10.0		9.3	66° 1165	−12 .0	−19 .7
18	55	10.2		9.5	66° 1176	+18 .6	−29 .3
19	59	10.4		9.5	66° 1173	+ 9 .8	−27 .0
20	64	10.6		9.5	66° 1170	− 2 .0	−23 .6
21	65	10.6	10.60			+ 5 .9	− 6 .9
22	66	10.7	10.74			−13 .9	+ 7 .0
23	68	10.7				−18 .3	−24 .5
24	69	10.8				+15 .2	−13 .4
25	70	10.8		9.5	66° 1158	−21 .1	−13 .7
26	72	10.9		9.5	67° 1113	−20 .3	− 0 .3
27	79	11.1				−19 .6	+ 5 .2
28	80	11.1				− 3 .7	− 8 .4
29	82	11.2				+ 7 .2	−13 .8
30	85	11.2				−14 .1	− 2 .3
31	89	11.4				+ 7 .5	−10 .3
32	89	11.4				−20 .1	− 3 .4

1* HR $3^M.24$ PD $3^M.32$, δ Draconis
2* HA 45 $6^M.81$ PD $7^M.15$

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
33	92	11.5				+17′.3	− 7′.2
34	92	11.5				−24 .0	+22 .3
35	94	11.6				+18 .5	− 7 .0
36	94	11.6				− 0 .4	+14 .9
37	95	11.7				+15 .6	+ 4 .5
38	95	11.7				+ 3 .8	+12 .9
39	97	11.9	$11^M.92$			− 1 .3	+ 1 .2
40	97	11.9				−10 .8	+10 .3
41	98	12.1				+ 9 .6	+10 .3
42	98	12.1				− 0 .3	+13 .9
43	99	12.3				+16 .1	+ 5 .1
44	99	12.3	12.33			− 5 .6	− 3 .4
45	100	12.5				−11 .9	+ 2 .3
46	102	12.7				+13 .4	+ 0 .9
47	102	12.7	12.60			+ 4 .7	− 2. 7
48	102	12.7	12.88			+ 0 .2	+ 5 .2
49	104	13.0				+12 .0	− 1 .6
50	105	13.1				−10 .1	− 0 .4
51	106	13.2				−12 .0	+ 2 .7
52	106	13.2				+ 6 .3	+ 8 .5
53	108	13.3				− 6 .5	− 4 .3
54	110	13.5				+ 6 .8	+ 4 .1
55	111	13.5				− 0 .6	− 3 .2
56	111	13.5	13.49			+ 1 .4	− 1 .2
57	113	13.6	13.57			+ 3 .9	− 0 .9
58	115	13.7				+ 8 .2	+ 2 .1
59	115	13.7				− 1 .6	+ 6 .3
60		13.9	13.91			+ 2 .7	3 .6
61		14.8	14.82			− 0 .1	+ 1 .0
62*		var			67° 1124	0 .0	0 .0

62* **U** 9^M — 14^M

190925

S Lyrae

19^h 7^m 16^s (1855.0) **+25° 45′.9**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	6.8		$6^M.9$	25° 3757	+ 9′.3	−15′.0	34	135	11.2				+10′.6	+ 8′.1
2	14	7.1		8.1	26° 3472	−23 .7	+23 .6	35	137	11.3	$11^M.11$			+ 1 .2	+ 7 .1
3*	19	7.2		7.5	26° 3477	−19 .4	+14 .7	36	139	11.4				+13 .1	+ 2 .6
4*	31	7.6		7.7	26° 3476	−21 .0	+16 .4	37	143	11.5				−12 .3	−12 .7
5	39	7.8		8.9	26° 3479	−13 .2	+25 .3	38	146	11.6				+ 2 .9	− 7 .8
6	43	7.9		9.0	26° 3475	−21 .0	+23 .6	39	152	11.7				− 5 .4	+ 5 .8
7	51	8.2		9.0	26° 3490	+ 8 .8	+26 .9	40	154	11.7				− 5 .1	+ 9 .9
8	57	8.4		8.7	25° 3770	+41 .2	− 0 .1	41	159	11.8	12.08			− 9 .2	− 0 .5
9	63	8.6		8.8	25° 3768	+33 .0	−16 .9	42	159	11.8	12.18			−10 .1	+ 1 .9
10	65	8.6		8.8	25° 3748	−10 .7	−15 .4	43	163	11.9				+ 5 .8	+ 1 .0
11	70	8.8	$8^M.76$	9.1	26° 3478	−15 .0	+17 .0	44	165	11.9				+ 5 .4	− 1 .5
12	75	8.9		9.0	25° 3761	+21 .7	−12 .9	45	170	12.0				+ 3 .0	− 3 .0
13	76	9.0	8.96	8.9	25° 3755	+ 6 .2	−12 .4	46	172	12.0				− 4 .5	+ 0 .3
14	78	9.0		9.1	26° 3488	+ 1 .9	+23 .8	47	173	12.1				+10 .2	− 5 .5
15	80	9.1		8.9	26° 3498	+29 .4	+21 .8	48	175	12.1				+12 .1	− 5 .7
16	84	9.2		9.2	25° 3767	+31 .2	−15 .3	49	175	12.1	11.59			+ 4 .3	− 0 .1
17	90	9.5		9.3	26° 3483	− 7 .3	+25 .6	50	177	12.2				+ 5 .5	− 6 .1
18	92	9.6		9.3	25° 3756	+ 7 .8	−14 .0	51	178	12.2	12.25			+ 2 .3	+ 2 .9
19	93	9.6		9.3	25° 3749	− 9 .8	−21 .9	52	179	12.3				+ 8 .3	− 7 .5
20	95	9.7		9.1	26° 3491	+14 .0	+25 .9	53	182	12.4				− 4 .7	− 1 .9
21	97	9.8		9.1	25° 3765	+29 .8	−18 .6	54	184	12.5				+ 7 .0	− 7 .0
22	98	9.8	9.85	9.5	25° 3750	− 7 .7	− 0 .6	55	186	12.6				+ 5 .8	+ 3 .1
23	102	9.9		9.4	25° 3760	+20 .6	− 6 .4	56	188	12.7				+ 4 .0	+ 5 .9
24	105	10.0	9.99	9.5	25° 3752	− 3 .2	+ 6 .0	57	189	12.8				+ 1 .8	− 5 .5
25	108	10.0	10.00			+ 7 .2	+ 7 .9	58	192	12.9	12.91			+ 1 .1	+ 1 .5
26	109	10.1		9.5	25° 3763	+25 .4	− 2 .6	59	192	12.9				− 4 .0	+ 0 .8
27	113	10.3		9.5	25° 3759	+16 .9	− 5 .0	60	196	13.1				− 0 .5	+ 3 .5
28	118	10.6				− 9 .0	−23 .9	61		13.6	13.60			+ 0 .7	+ 0 .2
29	120	10.7				+13 .7	+26 .0	62*		[14.4]				(− 0 .4)	(+ 0 .2)
30	124	10.9				− 7 .5	−15 .5	63*		[15?]				(− 0 .1)	(+ 0 .1)
31	127	11.0	11.24			− 6 .2	− 8 .8	64*		var			25° 3752ᵃ	0 .0	0 .0
32	131	11.1	10.87			− 5 .3	+ 7 .7	65*		var			26° 3486	− 1 .6	+46 .2
33	133	11.2	11.38			− 9 .6	−10 .1								

1* HA 54 $6^M.80$ PD $7^M.24$
3* HA 44 $7^M.40$ PD $8^M.05$ Bu 9112
4* HA 54 $7^M.41$

62* Parkhurst (*Res.* p. 107): α $14^M.4$ −22″ +13″
63* Parkhurst (*Res.* p. 107): β 15^M (var?) −9″ +8″
64* S $9\frac{1}{2}^M$ — <15^M
65* X $8\frac{1}{2}^M$ — 10^M

RS (& WW) Lyrae

19ʰ 7ᵐ 37ˢ (1855.0) **+33° 10′.1**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1	0	7.3		7.ᴹ6	33° 3350	−26′.3	− 4′.9
2	25	7.9		8.2	33° 3351	−25 .9	+27 .8
3	30	8.1		8.4	33° 3381	+24 .3	+10 .9
4	33	8.1		8.7	32° 3342	−33 .6	−10 .8
5	35	8.2		8.5	32° 3346	−29 .3	−19 .2
6	41	8.3		8.7	33° 3386	+28 .7	+15 .6
7	45	8.4		8.5	32° 3365	+12 .8	−25 .7
8	49	8.5	8.ᴹ54	8.7	33° 3366	− 7 .4	− 2 .5
9	55	8.7		8.9	33° 3362	− 9 .8	+17 .8
10	56	8.8		9.2	32° 3347	−26 .6	−23 .8
11	61	8.9		8.8	33° 3347	−34 .1	− 7 .5
12	65	9.0	9.01	8.7	33° 3371	− 0 .5	− 2 .1
13	73	9.1	9.05	8.9	33° 3367	− 7 .0	− 8 .4
14	77	9.2		9.2	33° 3357	−16 .8	+ 7 .6
15	78	9.2	9.21	9.2	33° 3379	+17 .0	+ 3 .0
16	82	9.4		9.3	33° 3385	+27 .3	+14 .1
17	84	9.5		9.5	33° 3372	+ 1 .9	+24 .7
18	85	9.6		9.2	33° 3355	−19 .4	− 1 .7
19	86	9.6		9.5	32° 3353	−13 .4	−22 .4
20	87	9.7	9.67	9.2	33° 3364	− 8 .7	− 3 .9
21	87	9.7		9.5	33° 3356	−18 .5	+21 .9
22	88	9.7		9.1	33° 3354	−20 .0	− 9 .7
23	91	9.8		9.5	33° 3360	−11 .9	+ 4 .0
24	93	9.9		9.5	32° 3369	+19 .8	−26 .9
25	94	9.9				−12 .1	−22 .9
26	95	10.0				+24 .7	− 8 .2
27	95	10.0		9.5	33° 3353	−20 .4	− 1 .7
28	100	10.1		9.5	33° 3365	− 7 .9	+ 8 .3
29	102	10.2				−17 .7	+11 .5
30	104	10.2				−11 .3	+ 3 .8
31	106	10.3				−14 .0	−22 .3
32	106	10.3	10.30	9.5	33° 3375	+ 6 .9	+ 4 .8
33	108	10.3				− 8 .4	−29 .6
34	108	10.3				− 2 .6	+13 .2
35	108	10.3				−23 .1	+11 .9
36	111	10.3				−22 .2	+20 .0
37	114	10.4				−15 .8	+23 .9
38	116	10.4				+25 .5	− 5 .1
39	116	10.4		9.5	33° 3380	+18 .7	+ 7 .4
40	116	10.4	10.77			− 6 .7	+ 1 .7

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
41	119	10.4	10.ᴹ40	9.ᴹ5	33° 3377	+15′.5	+ 4′.3
42	123	10.5		9.5	32° 3371	+28. 5	−13 .5
43	123	10.5				+14. 4	−15 .2
44	126	10.6	10.34			+13 .0	− 4 .7
45	128	10.7	10.64			+ 7 .9	−10 .6
46	128	10.7	10.27	9.5	33° 3368	− 5 .7	− 8 .7
47	130	10.8	11.13			+ 6 .2	+ 1 .7
48	130	10.8				−20 .4	−17 .8
49	133	11.1				−12 .2	− 9 .8
50*	135	11.2	11.42			+10 .8	+ 4 .5
51	137	11.3	11.08			− 9 .2	− 2 .2
52	139	11.4	11.18			− 5 .9	+ 3 .0
53	139	11.4				− 4 .9	− 8 .7
54	141	11.5	11.49			+ 8 .7	− 4 .1
55	142	11.5				− 7 .0	− 2 .5
56	145	11.6				+ 3 .2	− 9 .8
57	146	11.7				− 2 .8	− 4 .8
58	148	11.7				+14 .1	+ 6 .6
59	150	11.8				− 2 .1	− 7 .6
60	151	11.8				+10 .9	+10 .1
61	152	11.9	11.86			− 4 .9	− 4 .2
62	154	12.0	12.01			− 4 .8	+ 4 .7
63	157	12.5	12.64			+ 7 .3	+ 6 .1
64	158	12.6	12.47			− 2 .4	+ 1 .2
65	161	12.8				− 2 .5	− 3. 3
66	161	12.8				+11 .1	+ 7 .5
67	163	12.9				+13 .3	+ 5 .1
68	163	12.9				− 4 .3	− 0 .7
69	165	13.0				+ 1 .8	− 1 .4
70	167	13.1				+ 2 .2	− 2 .1
71	168	13.2				+ 2 .4	− 0 .1
72	169	13.2				+ 3 .8	+ 1 .3
73	170	13.3	13.27			+ 9 .5	+ 4 .7
74	176	13.6				− 1 .4	+ 1 .5
75	178	13.7				0 .0	+ 1 .8
76		14.5	14.54			− 0 .3	+ 0 .5
77*		var				0 .0	0 .0
78*		var				+ 9 .2	+ 4 .7

50* Color = 7ᶜ
77* RS 10ᴹ — < 14ᴹ
78* WW 13ᴹ — 14ᴹ

190933a

RS (& WW) Lyrae

$19^h\ 7^m\ 37^s$ (1855.0) $+33^\circ\ 10'.1$

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1	0	7.3		$7^{\mathrm{M}}.6$	33° 3350	−26′.3	− 4′.9
2	25	7.9		8.2	33° 3351	−25 .9	+27 .8
3	30	8.1		8.4	33° 3381	+24 .3	+10 .9
4	33	8.1		8.7	32° 3342	−33 .6	−10 .8
5	35	8.2		8.5	32° 3346	−29 .3	−19 .2
6	41	8.3		8.7	33° 3386	+28 .7	+15 .6
7	45	8.4		8.5	32° 3365	+12 .8	−25 .7
8	49	8.5	$8^{\mathrm{M}}.54$	8.7	33° 3366	− 7 .4	− 2 .5
9	55	8.7		8.9	33° 3362	− 9 .8	+17 .8
10	56	8.8		9.2	32° 3347	−26 .6	−23 .8
11	61	8.9		8.8	33° 3347	−34 .1	− 7 .5
12	65	9.0	9.01	8.7	33° 3371	− 0 .5	− 2 .1
13	73	9.1	9.05	8.9	33° 3367	− 7 .0	− 8 .4
14	77	9.2		9.2	33° 3357	−16 .8	+ 7 .6
15	78	9.2	9.21	9.2	33° 3379	+17 .0	+ 3 .0
16	82	9.4		9.3	33° 3385	+27 .3	+14 .1
17	84	9.5		9.5	33° 3372	+ 1 .9	+24 .7
18	85	9.6		9.2	33° 3355	−19 .4	− 1 .7
19	86	9.6		9.5	32° 3353	−13 .4	−22 .4
20	87	9.7	9.67	9.2	33° 3364	− 8 .7	− 3 .9
21	87	9.7		9.5	33° 3356	−18 .5	+21 .9
22	88	9.7		9.1	33° 3354	−20 .0	− 9 .7
23	91	9.8		9.5	33° 3360	−11 .9	+ 4 .0
24	93	9.9		9.5	32° 3369	+19 .8	−26 .9
25	94	9.9				−12 .1	−22 .9
26	95	10.0				+24 .7	− 8 .2
27	95	10.0		9.5	33° 3353	−20 .4	− 1 .7
28	100	10.1		9.5	33° 3365	− 7 .9	+ 8 .3
29	102	10.2				−17 .7	+11 .5
30	104	10.2				−11 .3	+ 3 .8
31	106	10.3				−14 .0	−22 .3
32	106	10.3	10.30	9.5	33° 3375	+ 6 .9	+ 4 .8
33	108	10.3				− 8 .4	−29 .6
34	108	10.3				− 2 .6	+13 .2
35	108	10.3				−23 .1	+11 .9
36	111	10.3				−22 .2	+20 .0
37	114	10.4				−15 .8	+23 .9
38	116	10.4				+25 .5	− 5 .1
39	116	10.4		9.5	33° 3380	+18 .7	+ 7 .4
40	116	10.4	10.77			− 6 .7	+ 1 .7
41	119	10.4	$10^{\mathrm{M}}.40$	$9^{\mathrm{M}}.5$	33° 3377	+15′.5	+ 4′.3
42	123	10.5		9.5	32° 3371	+28. 5	−13 .5
43	123	10.5				+14. 4	−15 .2
44	126	10.6	10.34			+13 .0	− 4 .7
45	128	10.7	10.64			+ 7 .9	−10 .6
46	128	10.7	10.27	9.5	33° 3368	− 5 .7	− 8 .7
47	130	10.8	11.13			+ 6 .2	+ 1 .7
48	130	10.8				−20 .4	−17 .8
49	133	11.1				−12 .2	− 9 .8
50*	135	11.2	11.42			+10 .8	+ 4 .5
51	137	11.3	11.08			− 9 .2	− 2 .2
52	139	11.4	11.18			− 5 .9	+ 3 .0
53	139	11.4				− 4 .9	− 8 .7
54	141	11.5	11.49			+ 8 .7	− 4 .1
55	142	11.5				− 7 .0	− 2 .5
56	145	11.6				+ 3 .2	− 9 .8
57	146	11.7				− 2 .8	− 4 .8
58	148	11.7				+14 .1	+ 6 .6
59	150	11.8				− 2 .1	− 7 .6
60	151	11.8				+10 .9	+10 .1
61	152	11.9	11.86			− 4 .9	− 4 .2
62	154	12.0	12.01			− 4 .8	+ 4 .7
63	157	12.5	12.64			+ 7 .3	+ 6 .1
64	158	12.6	12.47			− 2 .4	+ 1 .2
65	161	12.8				− 2 .5	− 3. 3
66	161	12.8				+11 .1	+ 7 .5
67	163	12.9				+13 .3	+ 5 .1
68	163	12.9				− 4 .3	− 0 .7
69	165	13.0				+ 1 .8	− 1 .4
70	167	13.1				+ 2 .2	− 2 .1
71	168	13.2				+ 2 .4	− 0 .1
72	169	13.2				+ 3 .8	+ 1 .3
73	170	13.3	13.27			+ 9 .5	+ 4 .7
74	176	13.6				− 1 .4	+ 1 .5
75	178	13.7				0 .0	+ 1 .8
76		14.5	14.54			− 0 .3	+ 0 .5
77*		var				0 .0	0 .0
78*		var				+ 9 .2	+ 4 .7

50* Color = 7^{C}
77* RS 10^{M} — < 14^{M}
78* WW 13^{M} — 14^{M}

191007

W (& TY) Aquilae

19^h 7^m 34^s (1855.0) — **7^0 17′.7**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1	0	8.2		$7^{M}.8$	6° 5092	+47′.3	+21′.2
2*	11	8.4	$8^{M}.44$	8.5	7° 4888	−38.1	−26.5
3	22	8.6		8.4	6° 5063	−40.3	+35.6
4	30	8.9		9.0	7° 4906	+14.5	+12.0
5	32	9.0		8.9	7° 4912	+31.5	+10.2
6	33	9.0	9.00	9.0	7° 4902	+ 8.5	+ 1.8
7	37	9.1		9.0	7° 4890	−32.9	+14.8
8	45	9.5	9.47	9.1	7° 4894	−13.2	− 6.0
9	47	9.5		10	7° 4901	+ 4.9	−29.8
10	51	9.7		9.3	7° 4911	+29.5	+11.6
11	52	9.7		9.5	7° 4893	−24.2	−26.3
12*	54	9.8		9.0	7° 4909	+23.7	−10.1
13	55	9.9		9.2	6° 5076	−13.1	+21.1
14	58	10.0		9.2	7° 4905	+14.1	+ 8.7
15	58	10.0	10.01	9.5	7° 4895	−11.3	− 8.9
16	63	10.2	10.21			− 7.7	−10.1
17	65	10.3				+21.8	+ 9.4
18	65	10.3		9.5	7° 4907	+15.4	−30.0
19	67	10.3		9.5	7° 4903	+ 8.5	−27.2
20	67	10.3		9.4	7° 4891	−31.6	− 5.8
21	69	10.4				+12.3	−15.7
22	69	10.4		9.5	7° 4900	+ 4.7	−31.6
23	74	10.5		9.6	6° 5070	−23.7	+18.2
24	75	10.5				− 2.0	− 6.8
25	76	10.6	10.31			+ 4.1	− 6.9
26	77	10.6	10.61	9.7	7° 4904	+ 8.8	− 5.9
27	78	10.6				−21.9	−28.1
28	81	10.8				− 1.9	− 9.9
29	83	10.9				+21.2	− 9.2
30*	83	10.9					
31	84	10.9		9.8	7° 4892	−28.3	−17.0
32	86	11.0		9.9	7° 4908	+16.5	0.5

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
33	87	11.1				− 8′.7	+15′.9
34	88	11.1				+10.9	0.2
35	88	11.1				−15.1	13.5
36	92	11.3				+ 9.4	−10.7
37	93	11.4				−12.8	− 4.0
38	94	11.4				−12.3	+ 4.0
39	97	11.6				7.3	+ 9.3
40	99	11.7				−14.5	+ 1.7
41	101	11.8				− 2.5	− 7.1
42	101	11.8	$11^{M}.83$			+ 1.0	− 4.1
43	104	11.9	11.91			− 3.6	− 2.5
44	104	11.9				+ 8.2	+ 5.0
45	105	12.0				− 0.3	−12.8
46	106	12.1	12.04			− 8.3	+ 3.8
47	108	12.2	12.16			+ 1.2	− 2.3
48	112	12.5				+11.1	−13.9
49	113	12.6				+ 7.4	+ 4.8
50*	115	12.7				+ 0.3	− 5.1
51	116	12.8				− 5.8	−10.5
52	122	13.2	13.18			− 2.5	− 0.4
53	124	13.2				+ 0.6	+ 2.2
54*	130	13.3				− 1.1	+ 4.1
55	131	13.4				+ 3.3	+ 1.0
56	136	13.4	13.47			− 1.0	+ 0.4
57	139	13.5	13.40			+ 0.7	− 1.0
58	154	13.7				− 1.9	− 0.7
59		13.7	13.68			+ 3.3	− 1.2
60		14.1	14.08			+ 0.8	+ 0.6
61*		var				0.0	0.0
62*		var			7° 4896	− 3.8	+ 2.1

2* Bu 9100
12* dpl, vide num. 30
30* comes num. 12

50*, 54* dpl
61* W 8^{M} — $13^{1}/_{2}{}^{M}$
62* TY 10^{M} — $11^{1}/_{2}{}^{M}$

191350

TZ Cygni

19^{h} 12^{m} 18^{s} (1855.0) **+49° 54′.2**

Num.	Grad.	Magn.	Bgd.	BD mag.	BD No.	1925.0 Δx	1925.0 Δy
1*		6.3		$6^{M}.3$	49° 2977	+24′.5	−35′.7
2*		6.3		6.3	49° 2968	− 7 .3	− 5 .3
3*	0	6.8		6.4	49° 2959[a]	−38 .5	−18 .4
4*	3	6.9		6.2	49° 2959	−38 .5	−18 .6
5*	8	7.1		7.3	49° 2969	+ 2 .5	−44 .2
6*	16	7.4	$7^{M}.40$	7.8	49° 2973	+11 .7	−18 .6
7*	21	7.7		8.0	49° 2976	+23 .4	+ 3 .9
8	28	8.2		8.2	49° 2965	−18 .3	−23 .3
9*	39	8.8	8.82	var	49° 2959[b]	37 .3	−30 .2
10	46	9.0		8.7	49° 2978	+27 .6	−18 .2
11*	49	9.1				−32 .5	−24 .3
12	55	9.3		8.8	49° 2971	+ 5 .0	−26 .9
13	60	9.4				+19 .5	+ 2 .0
14	62	9.5		8.5	50° 2759	+ 6 .7	+29 .1
15	64	9.5		9.2	49° 2967	− 7 .4	−26 .5
16	66	9.6		9.1	49° 2974	+21 .5	+ 3 .2
17	66	9.6		8.9	50° 2766	+16 .4	+19 .1
18*	67	9.6				−32 .8	−24 .7
19	69	9.7	9.66	9.0	49° 2972	+ 9 .9	−11 .7
20	75	9.8		8.8	50° 2750	− 7 .9	+21 .9
21	80	10.0	9.99	9.3	50° 2751	− 1 .8	+11 .4
22	84	10.1		9.0	50° 2757	+ 4 .4	+21 .6
23	85	10.1		9.5	50° 2747	−15 .8	+22 .1
24	90	10.2		9.4	50° 2770	+24 .0	+ 7 .3
25	97	10.3		9.5	49° 2963	−28 .8	− 2 .9
26	98	10.3	10.35	9.3	49° 2970	+ 3 .9	− 7 .0
27	104	10.4		9.5	50° 2755	+ 2 .2	+21 .1
28*	111	10.6				+16 .5	+ 6 .9
29	114	10.6	10.59			−10 .5	+ 5 .0
30	117	10.7				−14 .9	+ 3 .0
31	118	10.7				− 7 .3	− 9 .8
32	119	10.7				−11 .9	+12 .3
33	121	10.8				−28 .0	+ 8 .2
34	123	10.8				−27 .1	+ 9 .0
35	126	10.9				+ 0 .5	+15 .0
36*	126	10.9				+16 .4	+ 6 .5
37	131	11.0				+14 .0	+ 1 .6
38	134	11.1				+11′.0	−12′.6
39	134	11.1				+13 .9	− 2 .2
40	135	11.1				−10 .0	− 6 .7
41	138	11.2				+13 .6	−19 .6
42	140	11.2				+12 .6	− 4 .2
43	143	11.3	$11^{M}.54$			+ 4 .7	− 8 .6
44	145	11.4				− 9 .1	−10 .8
45	148	11.5				−12 .6	+ 1 .2
46	148	11.5	11.26			+ 1 .8	− 2 .5
47	152	11.6				+11 .5	− 8 .6
48	152	11.6	11.63			+ 0 .1	+ 2 .7
49	153	11.7				− 0 .2	− 6 .3
50	156	11.8				+13 .5	+ 7 .2
51	158	11.9				− 2 .6	− 9 .7
52	160	12.0				+11 .1	− 8 .3
53	161	12.0	11.95			− 2 .9	− 2 .2
54	163	12.1	11.98			+ 1 .3	+ 2 .5
55	164	12.1				+11 .7	−12 .6
56	166	12.2				+ 8 .3	− 9 .8
57	168	12.3				+ 8 .2	−13 .4
58	171	12.4				+ 6 .8	+ 3 .8
59	173	12.5				+ 9 .5	+ 4 .6
60	178	12.7				+ 5 .6	+ 7 .6
61	180	12.8				− 6 .2	+ 7 .3
62	184	13.0				+ 2 .4	− 4 .9
63	185	13.0				+ 7 .5	− 4 .1
64	187	13.1				− 6 .2	+ 3 .8
65	187	13.1				+ 5 .4	− 1 .3
66	187	13.1				0 .0	− 0 .4
67	191	13.3	13.34			+ 2 .1	+ 2 .2
68	196	13.5				+ 5 .1	− 2 .5
69	199	13.6				− 4 .0	+ 1 .7
70	201	13.7				− 2 .3	+ 0 .8
71	205	13.9				+ 3 .5	− 0 .5
72	220	14.5				+ 3 .9	− 0 .4
73*		var			49° 2968[a]	0 .0	0 .0

1* HR $6^{M}.26$ PD $6^{M}.48$
2* HR $6^{M}.34$ PD $6^{M}.55$ Bu 9185
3* HR $6^{M}.62$ PD $6^{M}.92$ } Bu 9137
4* HR $6^{M}.84$ PD $7^{M}.16$ }
5* HA **45** $7^{M}.40$ PD $7^{M}.37$
6* HA **24** $7^{M}.37$
7* HA **24** $7^{M}.62$

9* De hac stella vide AN **133**, 381, **134**, 308, **135**, 267; rationes ibidem allatae variabilitatem non probant.
11* + 18* = BD + 49° 2961, $8^{M}.8$
28* + 36* = BD + 50° 2765, $9^{M}.2$

73* **TZ** $9\frac{1}{2}^{M}$ — $11\frac{1}{2}^{M}$

191637

U (& UZ) Lyrae

$19^h\ 15^m\ 5^s$ (1855.0) **+37° 36′.3**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		6.2		$6^{M}.2$	37° 3413	−13′.7	−25′.8
2*		6.4		6.2	37° 3417	− 6 .2	−32 .5
3*		6.7		6.7	37° 3432	+29 .9	−17 .9
4	0	7.7		8.0	37° 3403	−30 .8	−15 .6
5*	9	8.0	$7^{M}.99$	7.5	37° 3410	−15 .9	−17 .3
6	21	8.3		8.5	38° 3545	+ 4 .8	+32 .9
7	35	8.7	8.72	8.4	37° 3430	+25 .3	+ 0 .4
8	40	8.9		8.8	38° 3544	+ 3 .8	+31 .4
9	40	8.9		9.0	37° 3427	+20 .8	−18 .3
10	43	9.0		8.4	38° 3527	−25 .2	+24 .3
11	45	9.0		8.7	38° 3525	−27 .0	+32 .6
12	49	9.1		9.0	37° 3411	−13 .9	−27 .9
13	51	9.2		8.6	38° 3558	+27 .0	+30 .5
14	56	9.4		9.2	37° 3404	−27 .3	+16 .3
15	59	9.4		9.0	37° 3405	−24 .9	+17 .4
16	60	9.5	9.50	9.0	37° 3414	− 8 .1	+ 9 .2
17	65	9.5	9.53	9.4	37° 3426	+19 .6	+ 5 .1
18	67	9.6				+22 .7	−21 .2
19	69	9.7	9.69	8.8	37° 3429	+24 .9	+ 5 .1
20	73	9.8		9.2	37° 3420	+ 6 .9	−24 .1
21	75	9.8		9.4	37° 3423	+10 .0	−11 .8
22	76	9.8		9.3	37° 3425	+13 .7	−21 .0
23	77	9.9				+16 .1	−23 .2
24	80	9.9		9.2	37° 3407	−22 .5	−11 .2
25	85	10.1	10.07	9.5	37° 3415	− 8 .2	−13 .2
26	90	10.3		9.5	37° 3416	− 8 .1	−19 .7
27	91	10.3				− 7 .0	−23 .0
28	93	10.4		9.5	38° 3552	+18 .8	+26 .2
29	95	10.4	10.47			−10 .2	− 5 .9
30*	(97)	(10.5)		9.5	37° 3421	+ 8 .0	−13 .4
31	97	10.5	10.44			+ 7 .4	− 2 .4
32	99	10.5				−10 .6	+12 .8
33	99	10.5				+20 .2	+27 .8

1* HR $6^{M}.19$ PD $6^{M}.46$
2* HR $6^{M}.36$ PD $6^{M}.25$
3* HA 45 $6^{M}.66$ PD $6^{M}.80$
5* HA 54 $7^{M}.73$ PD $8^{M}.00$
30* var, nebulae lucidae insita

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
34	100	10.5				+ 6′.8	−14′.8
35	101	10.5				+ 1 .8	+25 .7
36	101	10.5				−20 .9	+18 .9
37	103	10.6				+18 .9	+16 .7
38	107	10.6	$10^{M}.72$			+ 2 .6	+ 9 .1
39	108	10.6	10.49	$9^{M}.5$	37° 3418	− 3 .1	+ 7 .5
40	116	10.8				+ 8 .1	+12 .8
41	118	10.9	10.91			+ 4 .8	+ 7 .3
42	121	10.9	10.94			+ 0 .1	+10 .3
43	123	11.0				− 4 .9	− 6 .6
44	127	11.1				− 0 .9	−10 .1
45	129	11.1	10.99	9.5	37° 3418^{a}	− 1 .0	− 0 .1
46	129	11.1	11.28			+14 .1	+13 .4
47	131	11.2	11.29			+12 .6	+ 9 .9
48	135	11.3	11.30			− 0 .6	+ 1 .1
49	138	11.5				− 5 .0	− 2 .5
50	144	11.8				− 5 .9	− 4 .7
51	146	11.9	11.93			+13 .4	+11 .7
52	149	12.0				+ 5 .2	+ 5 .6
53	152	12.1				+10 .2	+ 2 .9
54	152	12.1				+11 .1	− 0 .8
55	154	12.2				+ 9 .8	− 2 .0
56	156	12.2				+ 4 .9	+ 3 .0
57	162	12.4				− 1 .6	− 2 .5
58	166	12.5				+ 3 .5	− 2 .0
59	166	12.5				+ 2 .8	+ 2 .3
60	169	12.6				− 0 .5	+ 3 .9
61	170	12.6				+ 2 .8	− 3 .3
62	170	12.6				+ 3 .3	− 1 .9
63	173	12.7				− 1 .3	+ 3 .0
64	179	12.9				+ 0 .4	+ 1 .2
65*		(13)				0 .0	− 0 .2
66*		var			37° 3418^{b}	0 .0	0 .0
67*		var			37° 3424	+11 .8	+ 3 .5

65* Stella haec ipsam variabilem U fere semper luce photographica superat, oculo autem variabilis U apparet clarior
66* U $8^{1}/_{2}{}^{M}$ — 12^{M}
67* UZ 10^{M} — $11^{1}/_{2}{}^{M}$

192928

TY Cygni

$19^h\ 28^m\ \ 2^s$ (1855.0) **+28° 1′.0**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		3.2		$3^{M}.0$	27° 3410	−41′.8	−21′.7
2*		5.4		6.5	27° 3411	−41 .3	−21 .4
3	0	7.4		8.2	28° 3373	−31 .0	+23 .6
4*	6	7.5		8.0	27° 3421	−23 .4	− 3 .5
5*	25	7.8		8.1	28° 3392	+ 4 .3	+ 5 .2
6*	31	7.9		8.5	27° 3437	+19 .6	−28 .0
7	43	8.1		8.7	27° 3438	+20 .7	−25 .3
8	45	8.1		8.7	27° 3425	−19 .6	−24 .2
9	50	8.2		8.7	28° 3404	+17 .6	+23 .5
10	59	8.3		9.2	27° 3424	−19 .8	−22 .2
11	64	8.4	$8^{M}.37$	8.9	28° 3379	− 9 .3	+11 .8
12	66	8.5		9.0	28° 3394	+ 7 .1	+18 .9
13	67	8.5		8.8	28° 3378	− 9 .7	+30 .9
14	74	8.8		9.2	28° 3387	− 1 .0	+27 .7
15	75	8.9		9.3	27° 3441	+26 .7	− 3 .2
16	76	8.9		9.1	28° 3393	+ 4 .2	+18 .5
17	82	9.2	9.18	9.4	28° 3391	+ 3 .5	+11 .3
18	85	9.3				+11 .7	+19 .4
19	85	9.3				+ 1 .9	−15 .6
20	87	9.4	9.44	9.5	27° 3433	+ 0 .9	− 2 .5
21	89	9.5	9.45	9.3	28° 3393[a]	+ 4 .9	+ 6 .2
22	90	9.5				−10 .1	+11 .4
23	90	9.5		9.5	28° 3400	+12 .8	+ 6 .2
24	93	9.6	9.64	9.4	28° 3382	− 4 .3	+ 9 .3
25	96	9.8				+ 2 .7	+17 .6
26	99	9.9	10.27			+ 3 .1	− 0 .8
27	99	9.9		9.5	28° 3383	− 3 .3	+ 6 .5

1* HR $3^{M}.24$ PD $3^{M}.16$ } Bu 9374
2* HR $5^{M}.36$ PD $5^{M}.60$ }
4* Bu 9394
5* HA **74** $7^{M}.85$
6* dpl

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
28	102	10.0				+ 4′.0	+ 9′.6
29	104	10.0	$10^{M}.05$			− 3 .1	+ 1 .9
30	106	10.1	10.05			+ 3 .1	− 8 .8
31	108	10.1	9.86	$9^{M}.5$	28° 3384	− 2 .9	+11 .0
32	110	10.1	9.98			− 0 .8	− 6 .4
33	114	10.3				+ 4 .5	−13 .4
34	114	10.3				+ 5 .8	−11 .9
35	115	10.3	10.29			+ 5 .0	− 6 .6
36	117	10.4				− 1 .6	−15 .2
37	119	10.5				−10 .8	− 0 .7
38	122	10.7				− 3 .6	+ 5 .9
39	122	10.7				− 6 .5	+ 6 .4
40	126	10.9				− 6 .3	+ 1 .9
41	129	11.1	11.13			− 1 .4	− 3 .2
42	131	11.2	11.16			− 1 .0	+ 1 .3
43	136	11.6	11.72			− 1 .5	+ 0 .2
44	138	11.7				+ 2 .8	− 1 .1
45	140	11.8				+ 3 .4	+ 1 .0
46	145	11.9				+ 2 .0	+ 0 .1
47	149	12.0	12.02			+ 0 .2	− 3 .8
48	152	12.2				+ 4 .0	− 0 .5
49	158	12.6				+ 4 .1	− 0 .1
50	161	12.9				+ 1 .8	− 0 .4
51	165	13.2	(13.22)			− 0 .3	− 0 .5
52	167	13.3				+ 0 .5	− 0 .1
53*		var			28° 3387[a]	0 .0	0 .0

53* TY $8^{1/2 M}$ — $13^{1/2 M}$

193311 & 193411

RT & SV Aquilae

19h 31m 43s (1855.0) **+11° 30′.5**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		6.2		6.ᴹ1	10° 3984	−24′.6	−33′.5
2*		6.8		7.0	11° 3906	−34.1	+19.9
3	0	8.6		8.1	12° 4001	+ 0.3	+31.5
4	9	8.9		8.8	11° 3937	+23.5	−10.8
5	10	9.0		8.9	11° 3935	+18.2	+18.7
6	14	9.1	9.ᴹ12	8.9	11° 3916	−17.5	− 1.0
7	15	9.1		8.9	12° 4002	+ 0.5	+32.1
8	15	9.1		8.6	11° 3912	−28.1	+29.3
9	20	9.2		9.2	11° 3918	−12.8	−26.6
10	20	9.2		9.2	11° 3923	+ 1.6	−20.7
11	21	9.3		9.2	11° 3925	+ 6.6	−26.2
12	23	9.3	9.23	9.3	11° 3928	+ 9.5	+ 1.3
13	25	9.4	9.48	9.0	11° 3931	+13.3	+ 3.4
14	26	9.5		9.1	11° 3938	+25.3	+21.2
15	26	9.5		9.2	11° 3932	+13.6	−10.5
16	29	9.6		9.4	11° 3924	+ 3.1	+25.4
17	30	9.7	9.68	9.5	11° 3926	+ 6.8	− 3.2
18	33	9.8		9.3	11° 3936	+22.2	−25.2
19*	33	9.8		9.2	11° 3920	− 6.2	+18.8
20	33	9.8		9.3	11° 3933	+13.7	−19.3
21	34	9.8		9.5	11° 3917	−13.5	−20.3
22	36	9.9	9.84			+ 4.5	+ 8.3
23	37	9.9	9.90	9.2	11° 3922	− 0.2	− 5.5
24	38	10.0	9.98	9.3	11° 3929	+12.6	+ 1.5
25	40	10.0				+ 9.6	− 1.5
26	41	10.0		9.2	11° 3930	+12.9	+27.5
27	43	10.1	10.08			− 4.7	+ 2.6
28	43	10.1	9.86	9.4	11° 3921	− 2.1	+ 2.1
29	44	10.2	10.16	9.5	11° 3919	− 9.8	−12.3
30	44	10.2				+12.8	− 3.3
31	44	10.2		9.3	11° 3934	+17.3	+25.3
32	47	10.3		9.4	11° 3914	−22.1	−22.5
33	49	10.4		9.5	12° 4004	+ 1.9	+32.3
34	49	10.4				+12.7	+10.7
35	53	10.6		9.5	11° 3911	−28.3	−22.3
36*	54	10.7		9.4	11° 3910	−28.7	−11.1
37	55	10.7				−28.5	−11.0
38	55	10.7		9.4	11° 3915	−19.5	−23.4
39	57	10.8	10.85			− 3.1	− 4.5
40	58	10.8				+ 1.6	− 5.7

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
41	58	10.8		9.ᴹ4	11° 3913	−27′.6	−20′.2
42	60	10.9	10.ᴹ92			− 4.5	−10.1
43	62	10.9	10.85			−11.6	+ 1.7
44	66	11.1				− 1.7	+ 2.7
45	69	11.2	11.19			− 5.3	+ 3.6
46	71	11.3				+ 2.0	+ 5.7
47	73	11.5				+ 4.0	+ 1.6
48	75	11.6				− 2.3	+ 0.2
49	76	11.6				+ 0.4	+11.0
50	76	11.6				+ 0.9	+ 0.9
51	76	11.6				− 0.3	− 6.2
52	77	11.7	11.79			+ 5.7	+ 6.8
53	77	11.7				+13.3	+ 9.9
54	78	11.7				− 0.1	− 6.1
55	79	11.7				− 2.0	+ 9.1
56	80	11.8				− 4.4	+ 0.2
57	80	11.8				−12.5	− 6.6
58	82	11.8	(11.88)			−12.5	− 2.0
59	82	11.8				−12.2	− 6.8
60	84	11.8				−14.9	− 5.2
61	91	12.0	11.90			−10.9	− 3.2
62*	96	12.2				−12.3	− 4.3
63	99	12.3				−10.1	− 7.8
64	99	12.3				+ 4.7	+ 2.0
65	102	12.5				+ 4.1	+ 3.1
66	102	12.5	12.53			− 9.0	− 8.4
67	106	12.7				+ 7.6	+10.8
68	107	12.8	12.90			− 6.1	− 7.5
69	109	12.9				− 9.8	− 6.2
70	111	13.0				+ 1.0	+ 8.4
71	113	13.1	12.59			+ 8.6	+ 8.3
72*	115	13.2	13.22			− 7.5	− 7.8
73	117	13.3				+ 0.6	+ 7.2
74	118	13.3				+ 6.5	+ 6.2
75		12.1	12.06			− 2.1	− 6.4
76		12.4	12.37			+10.7	+ 5.3
77		13.1	13.11			+ 4.1	+ 7.9
78*		var			11° 3919a	− 7.4	− 6.7
79*		var				+ 7.4	+ 6.7

1* HR 6.ᴹ16 PD 6.ᴹ22
2* HA 54 6.ᴹ78 PD 6.ᴹ88
19*, 36* dpl

62*, 72* dpl
78* RT 7½ᴹ – 13½ᴹ
79* SV 11ᴹ — 14½ᴹ

RV Aquilae

$19^h\ 33^m\ 48^s$ (1855.0) **+ $9^0\ 35'.9$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1	0	8.1		$8^{M}.5$	9° 4185	−32′.2	+ 7′.1
2	3	8.2	$8^{M}.18$	8.2	9° 4202	− 3.8	− 9.2
3	11	8.4		8.6	10° 4006	−20.1	+27.6
4	13	8.4		8.2	9° 4217	+21.0	+ 3.4
5	24	8.7		8.7	9° 4183	−35.7	+ 3.3
6	25	8.7		8.2	9° 4212	+10.2	+15.8
7	27	8.8		8.7	9° 4188	−25.8	−27.4
8	30	8.8		8.6	9° 4206	+ 3.6	−30.6
9	35	9.0		9.0	9° 4189	−25.0	+22.3
10	35	9.0		8.9	9° 4216	+18.8	−18.9
11	40	9.1	9.14	8.9	9° 4209	+ 5.9	− 2.9
12	42	9.1	9.01	9.0	9° 4210	+ 7.0	+ 6.7
13	46	9.2		9.1	9° 4208	+ 5.0	−13.6
14	49	9.3		9.0	9° 4222	+29.0	−11.9
15	51	9.4		9.0	9° 4225	+32.4	−10.2
16	51	9.4		8.7	9° 4184	−34.3	+ 9.5
17	53	9.5		9.2	9° 4215	+16.3	− 5.6
18	55	9.5		8.9	9° 4190	−24.4	+18.3
19	60	9.7		9.2	9° 4195	−18.6	−17.9
20	60	9.7		9.3	9° 4221	−28.0	+12.6
21*	62	9.8				−18.1	+16.5
22	65	9.9		9.3	9° 4219	+23.7	−17.2
23	70	10.0		9.4	9° 4203	− 1.7	+18.2
24*	71	10.1				−18.1	+16.3
25	71	10.1		9.2	9° 4198	−17.1	+19.8
26	72	10.1		9.4	9° 4218	+22.2	+13.1
27	72	10.1	10.14	9.5	9° 4204	− 1.3	−11.4
28	76	10.2		9.5	9° 4196	−18.2	+15.4
29	77	10.2				−16.2	−20.2
30	78	10.3				+21.6	+ 2.2
31	80	10.3		9.3	9° 4214	+16.4	−17.1
32	82	10.4				−10.8	− 8.2
33	82	10.4				+ 3.4	−30.4
34	83	10.4	10.34			− 1.8	+ 3.6
35*	83	10.4				+15.9	−12.9
36	84	10.5		9.5	9° 4207	+ 4.6	+10.5
37	87	10.7	10.74			+ 1.0	+ 3.6
38*	87	10.7				+16.3	−12.9
39	89	10.8				+18.4	−20.9
40	89	10.8				+16.4	+23.0
41	94	11.1	11.11			+ 6.6	− 3.3
42	98	11.5	11.51			+ 4.2	− 3.3
43	98	11.5	11.68			+ 0.8	+ 1.8
44	98	11.5				−12.1	−10.6
45	100	11.6				− 9.4	− 0.9
46	103	11.7				+ 9.3	+ 9.0
47	105	11.8				+ 8.0	+ 2.7

21* + 24* = BD + 9° 4197, $9^{M}.0$ Bu 9493
35* + 38* = BD + 9° 4213, $9^{M}.5$

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
48	106	11.8				− 4′.5	+10′.3
49	109	11.9				+ 2.7	+ 6.9
50	109	11.9				− 6.2	+ 5.5
51	109	11.9				− 5.1	− 9.2
52	111	12.0				+10.8	+ 3.9
53	111	12.0				+ 6.3	−14.5
54	111	12.0				+ 1.2	+10.3
55	111	12.0	($11^{M}.94$)			− 0.2	+ 5.9
56	111	12.0				− 3.6	− 8.6
57	111	12.0				− 6.6	−10.6
58	112	12.0				+ 2.5	+11.8
59	114	12.1				+10.2	+ 9.2
60	114	12.1				− 8.2	−11.8
61	115	12.1				− 0.3	+12.1
62	117	12.2				−13.0	− 8.4
63	118	12.3				+ 9.7	− 5.6
64	120	12.3				−14.2	−14.2
65	121	12.4				− 4.6	+ 0.1
66	123	12.5				− 8.9	0.0
67	124	12.5				+ 6.2	− 7.5
68	124	12.5				− 0.3	−10.3
69	124	12.5				− 7.7	− 0.4
70	125	12.5				+ 2.6	+ 7.1
71	127	12.6	12.63			− 0.5	− 1.6
72	128	12.7				+ 2.3	+ 5.7
73	128	12.7				+ 1.7	+ 7.4
74	130	12.8	12.86			− 1.5	+ 0.3
75	130	12.8				+ 7.7	− 7.5
76*	130	12.8				+ 7.2	− 1.4
77	132	12.9				− 3.1	− 0.6
78	134	12.9				+11.2	−11.8
79	134	12.9				− 3.7	+ 1.8
80	136	13.0				− 1.5	+ 1.0
81	139	13.1				− 2.2	+ 0.9
82	141	13.2				− 0.3	+ 1.6
83	143	13.3	13.25			+ 1.3	+ 0.2
84	144	13.3				+ 2.6	− 3.0
85	146	13.4	13.38			+ 1.6	− 0.9
86	146	13.4				+ 8.1	− 7.5
87	148	13.4				+ 3.6	+ 0.1
88	149	13.5				+ 2.2	− 5.1
89	150	13.5				+ 1.7	− 3.0
90	153	13.6				+ 1.2	− 3.3
91	153	13.6				+ 0.2	+ 0.9
92	156	13.7				− 1.6	+ 1.6
93	156	13.7				− 3.7	− 2.5
94*		var			9° 4205	0.0	0.0

76* dpl
94* RV 8^{M} — < $13^{1}/_{2}{}^{M}$

194348

TU (& RT) Cygni

$19^h\ 42^m\ 5^s$ (1855.0) **+48° 43′.2**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1	0	8.4	$8^M.41$	$8^M.0$	48° 2943	−24′.9	−8′.3
2	1	8.5		8.2	48° 2939	−33.7	−37.8
3	3	8.7	8.73	8.0	48° 2941	−26.8	−28.5
4	3	8.7		8.5	48° 2956	+21.6	+9.6
5	5	8.9		8.6	48° 2950	+8.2	−8.6
6	13	9.2		9.3	48° 2944	−15.1	+16.3
7*	15	9.3		9.1	49° 3091	−24.0	+22.6
8	15	9.3	9.19	8.9	48° 2957	+31.6	−2.2
9	16	9.4	9.54			−8.3	−15.1
10*	17	9.5		9.0	48° 2952	+16.2	−6.7
11	19	9.7	9.72			+4.2	+4.7
12	20	9.8	10.33			−7.1	+4.6
13	20	9.8	9.79			−25.8	−14.2
14	21	9.9		9.5	48° 2953	+18.6	−19.5
15	23	10.1	10.10	9.4	48° 2945	−14.8	+6.5
16*	23	10.1				−11.2	−14.5
17	24	10.2		9.3	48° 2951	+14.8	−17.8
18	(24)	(10.2)	10.77			+9.0	−3.1
19	25	10.3		9.5	49° 3093	−17.9	+24.6
20	27	10.5	10.46			−0.4	−5.9
21	27	10.5				+8.9	−9.1
22	28	10.6				−15.8	+23.3
23	28	10.6	10.74			+4.7	+0.6
24	29	10.6				+14.0	+2.5
25	30	10.6	10.52			−1.2	+3.6
26	30	10.6				−22.3	−26.0
27	30	10.6				−23.7	−24.0
28	33	10.7				+2.7	−12.8
29	34	10.7				+15.2	−19.8
30	34	10.7				−0.9	+11.6
31	34	10.7	10.69			−23.1	−16.0
32	35	10.8				+12.9	+11.3
33	36	11.0				+0.9	+9.1

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
34	37	11.1				−20′.1	−23′.3
35	38	11.2	$11^M.23$			−24.2	−17.4
36	39	11.3				−12.6	+11.7
37	40	11.3	11.33			+1.2	+1.7
38	41	11.4				−10.0	+11.0
39	43	11.6				−1.6	+8.1
40	44	11.7	11.68			+6.4	−0.6
41	45	11.8				+3.8	−3.0
42	45	11.8				+8.4	+5.5
43	46	11.9				−12.2	+11.7
44	47	11.9				2.2	+11.9
45	48	12.0				−1.3	+8.6
46	48	12.0	12.14			−25.1	−16.8
47	50	12.0				+3.5	−2.6
48	50	12.0	12.00			−27.9	−15.8
49	52	12.0				+0.9	+4.8
50	52	12.0	11.88			−0.1	−3.4
51	54	12.1				+0.9	−6.9
52	57	12.3				+0.4	−5.1
53	59	12.5				−2.4	−3.4
54	61	12.7	12.59			+0.8	−0.9
55	62	12.8	12.88			−26.9	−17.1
56	63	12.9				+1.3	+3.0
57	64	13.0				+2.7	+0.5
58	65	13.0				0.0	−2.6
59	69	13.3				+2.3	+4.5
60	69	13.3				−0.6	−2.2
61		9.1	9.06	$8^M.8$	48° 2960	+39.7	−8.9
62*		11.8	11.79			+35.4	−6.9
63		(14.2)	(14.23)			+3.3	+0.3
64*		var				0.0	0.0
65*		var			48° 2942	−25.3	−17.2

7*, 16* dpl
10* Bu 9651

62* nebula planet. NGC 6833
64* TU $8^1/_2{}^M$ — $15^1/_2{}^M$
65* RT $6^1/_2{}^M$ — 12^M. Chartam huius Var. vide in Serie IV 7085

194604

X Aquilae

19^{h} 44^{m} 17^{s} (1855.0) **+ 4^{0} 5′.9**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	6.3		6^{M}.5	4^{0} 4264	+28′.1	− 4′.0	26	140	11.5				+ 2′.2	+12′.5
2*	5	6.6		6.8	3^{0} 4172	− 0.9	−22.6	27	140	11.5				− 5.9	−11.3
3	38	7.7	7^{M}.74	7.8	4^{0} 4243	− 9.6	− 1.1	28	142	11.6	11^{M}.60			− 3.4	− 5.8
4	45	8.4	8.45	8.6	3^{0} 4176	+12.2	−10.8	29	143	11.6				+ 7.4	+ 6.6
5	55	8.5	8.42	8.7	3^{0} 4170	− 3.7	−12.7	30	145	11.7				−11.7	+ 7.8
6	68	8.8		9.2	4^{0} 4258	+14.8	+25.1	31	147	11.8				−12.5	− 4.5
7	80	9.2		9.3	3^{0} 4174	+10.2	−22.7	32	150	11.9				− 7.6	+ 3.6
8	81	9.2		8.9	4^{0} 4238	−24.4	+19.1	33	151	12.0	12.22			− 0.5	− 2.4
9	89	9.5		9.2	4^{0} 4249	− 1.4	+29.5	34	152	12.0				+ 6.5	− 4.2
10	105	9.9	10.04	9.5	4^{0} 4242	−14.4	+ 1.2	35	154	12.0	11.80			+ 5.8	+ 1.9
11	106	9.9		9.3	4^{0} 4239	−21.7	+ 4.7	36	155	12.1				+ 3.6	+13.0
12	108	9.9		9.4	4^{0} 4265	+29.0	+ 0.7	37	155	12.1				+ 1.8	+ 3.9
13	110	9.9		9.4	3^{0} 4180	+27.7	−26.7	38	156	12.1				− 6.6	+ 4.1
14	111	10.0		9.4	3^{0} 4178	+18.6	−12.6	39	157	12.1				+ 6.8	−12.0
15	114	10.0	9.99	9.5	4^{0} 4257	+14.9	− 2.6	40	158	12.2				−13.9	− 2.0
16	115	10.1				+10.7	−13.6	41	158	12.2				+ 4.1	+11.4
17	117	10.1	9.97	9.5	4^{0} 4255	+ 9.7	+ 6.8	42	159	12.2				+ 6.1	− 7.5
18	120	10.3		9.5	3^{0} 4167	−15.2	− 9.7	43	159	12.2				− 5.6	− 4.6
19	120	10.3		9.5	4^{0} 4246	− 6.7	+13.4	44	162	12.4				+ 8.4	− 2.9
20	122	10.4				− 9.4	−10.5	45	163	12.5				− 4.7	− 4.5
21	123	10.5		9.5	4^{0} 4240	−21.1	+18.7	46	168	12.8	12.85			+ 5.5	+ 0.4
22	124	10.6	10.61			− 3.0	+ 8.1	47	171	13.0				− 3.1	+ 0.8
23	128	10.8				+22.8	− 1.3	48	180	13.6				− 0.7	+ 1.5
24	131	11.0				+25.8	+ 2.9	49*		var			4^{0} 4250	0.0	0.0
25	134	11.1				−13.8	− 0.1								

1* HR 6^{M}.30 PD 6^{M}.88
2* HA 45 6^{M}.60 PD 6^{M}.66 Bu 9664

49* X 8$^{1}/_{2}$^{M} — <13$^{1}/_{2}$^{M}

195202

RR Aquilae

19ʰ 50ᵐ 4ˢ (1855.0) **— 2° 16′.1**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*	0	6.6		$7^{M}.0$	2° 5159	+31′.3	− 5′.3	31	100	11.5				−18′.3	+ 3′.8
2*	8	7.0	$7^{M}.04$	7.5	2° 5155	+11.5	−20.9	32	102	11.6	$11^{M}.60$			+ 8.8	− 6.5
3	28	8.5		8.7	2° 5147	−25.2	− 0.4	33	103	11.6				+ 2.9	+15.1
4	31	8.7	8.75	8.7	2° 5151	− 5.0	− 6.5	34	104	11.7	11.78			− 7.7	+ 0.5
5	37	9.0		8.8	2° 5149	−11.5	−24.7	35	106	11.8				− 5.6	+ 7.2
6*	45	9.3	9.27	9.2	2° 5153	+ 2.3	− 8.1	36	108	11.9	11.99			− 5.1	− 9.0
7	48	9.4		9.0	1° 3875	+31.8	+27.1	37*	110	11.9				− 0.8	+14.6
8	55	9.7		9.2	2° 5154	+ 9.3	−28.5	38	111	11.9				+13.6	− 9.9
9	57	9.8		9.5	1° 3861	−16.1	+20.1	39	112	11.9	11.74			− 0.1	− 3.6
10	59	9.9		9.2	1° 3872	+13.9	+19.7	40	114	12.0	12.23			− 0.9	− 9.6
11*	62	10.0		9.4	1° 575	−25.2	+16.6	41	117	12.1				+11.7	− 7.0
12	66	10.2		9.5	2° 5146	−29.0	+ 7.6	42	118	12.1	12.01			−11.3	− 1.5
13	70	10.4				+ 1.4	+12.0	43	119	12.1				+ 4.7	−14.4
14	71	10.4		9.5	2° 5158	+23.6	− 5.5	44	121	12.2				+ 3.8	−12.7
15	72	10.5				+14.5	+26.8	45	122	12.3				+10.0	−11.8
16	72	10.5				+14.6	+ 7.0	46	123	12.4				+ 3.0	+ 9.9
17	72	10.5	10.48	9.8	2° 5150	− 9.5	−15.3	47*	125	12.5				+ 9.2	−10.2
18	75	10.6		9.5	1° 3866	+ 8.7	+24.1	48	127	12.6				− 0.3	+ 7.8
19	78	10.8				+12.8	+ 5.4	49	130	12.7				−11.9	+ 6.3
20	80	10.9				−12.6	+19.9	50	135	13.0				+ 2.9	+ 5.6
21	82	11.0	10.97	9.8	2° 5148	−11.8	−13.8	51	139	13.2				− 1.7	+ 4.3
22*	84	11.0				+ 0.6	+16.7	52	142	13.4				− 2.7	− 3.2
23	86	11.1		9.4	1° 3874	+17.8	+16.8	53	144	13.5	13.49			− 0.4	+ 1.8
24*	87	11.1				+ 0.9	+17.0	54	144	13.5				− 5.4	+ 6.6
25	93	11.3		9.8	2° 5156	+17.4	−24.3	55*	146	13.6				− 2.5	− 1.1
26	97	11.4				+14.2	+ 0.9	56*	146	13.6				− 6.7	+ 0.6
27*	99	11.5		9.8	2° 5152	− 0.2	−25.3	57	146	13.6				− 3.1	− 0.4
28	99	11.5	11.53			+ 2.0	− 5.1	58	151	14.0	(14.01)			− 1.9	0.0
29	99	11.5				− 6.8	+15.1	59	155	14.2				+ 0.5	+ 1.9
30	100	11.5	11.45			− 9.1	− 8.5	60*		var				0.0	0.0

1* HA 45 $6^{M}.61$
2* Bu 9755
6* Color = 6^{C}
11* BB VIII
22* + 24* = BD − 1° 3865, $9^{M}.5$

37*, 47*, 55*, 56* dpl
60* RR $8\frac{1}{2}^{M}$ — 13^{M} (8^{C})

195308

RS Aquilae

19ʰ 51ᵐ 17ˢ (1855.0) — **8° 16′.3**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
1*	0	7.7	$7^{M}.66$	$7^{M}.8$	8° 5186	+ 4′.4	−12′.4	36	105	11.2	$11^{M}.29$		+ 7′.0	+ 0′.6
2*	0	7.7		7.3	7° 5114	−28 .3	+28 .9	37	109	11.3			+12 .6	− 10 .8
3	24	8.3		8.8	8° 5175	24 .3	−12 .4	38	113	11.4			+12 .7	− 9 .7
4	29	8.5	8.48	8.5	8° 5178	−13 .5	− 8 .0	39	114	11.4			+ 1 .2	−10 .0
5	44	8.9		9.0	8° 5182	− 4 .4	−22 .5	40	116	11.4	11.33		− 3 .1	+ 8 .9
6	45	9.0	8.97	9.1	8° 5185	+ 1 .1	+10 .4	41	118	11.5			− 6 .2	+ 8 .3
7	46	9.0		9.0	8° 5196	+26 .9	33 .1	42	122	11.6			+ 9 .3	+10 .3
8	55	9.3		9.5	8° 5180	−11 .9	−14 .0	43	124	11.6			+ 8 .8	−17 .0
9	55	9.3		9.1	8° 5171	−35 .7	− 0 .4	44	127	11.7			+12 .0	+ 5 .8
10	59	9.4		9.3	8° 5181	− 7 .3	−27 .1	45	129	11.8			−21 .1	+ 0 .1
11	62	9.5		9.1	8° 5195	+25 .6	+ 3 .6	46	129	11.8			− 5 .7	−14 .9
12	63	9.6		9.4	8° 5194	+24 .6	−14 .2	47	131	11.9			+ 8 .6	+ 3 .0
13	65	9.6		9.5	8° 5189	+10 .4	9 .3	48	134	11.9			−26 .5	− 5 .8
14	65	9.6		9.7	8° 5198	+29 .9	− 6 .5	49	137	12.0			− 0 .2	− 7 .4
15	65	9.6		9.2	7° 5113	−28 .4	+22 .3	50	137	12.0			+ 8 .8	+ 1 .9
16	70	9.8		9.5	8° 5177	−20 .2	−28 .0	51	139	12.1			−14 .4	+ 2 .8
17	70	9.8		9.5	8° 5179	−12 .3	−29 .4	52	141	12.2			−15 .5	− 8 .4
18	72	9.9		9.4	8° 5199	+31 .9	− 9 .3	53	141	12.2			+12 .0	+ 4 .4
19	72	9.9		9.4	8° 5174	−26 .7	+ 3 .8	54	143	12.2			+ 3 .3	+ 8 .3
20	73	9.9	9.87	9.4	8° 5183	− 1 .9	+11 .2	55	144	12.3			+ 2 .5	+ 8 .2
21	77	10.1		9.4	7° 5123	−10 .3	+19 .4	56*	145	12.3			−13 .7	+ 6 .0
22	79	10.2		9.8	8° 5197	+27 .4	−22 .8	57	145	12.3	12.22		− 4 .3	− 1 .1
23	81	10.3		9.7	8° 5192	+19 .3	−25 .9	58	148	12.6			8 .7	− 0 .7
24	82	10.3		9.5	7° 5127	+ 0 .9	+17 .5	59	150	12.7	12.82		− 5 .0	− 0 .9
25	86	10.6	10.59	9.8	8° 5188	+ 7 .2	+ 1 .9	60	152	12.8			− 9 .4	− 1 .0
26	89	10.7		9.9	8° 5193	+21 .9	−15 .4	61	154	12.8	12.82		− 3 .4	+ 0 .5
27	90	10.7				−10 .9	+25 .2	62*	157	12.9	12.80		+ 2 .2	+ 0 .2
28	94	10.9				+22 .9	−14 .2	63*	158	12.9			−11 .2	+ 0 .3
29	94	10.9	10.92	9.8	8° 5190	+10 .9	+ 1 .5	64	159	13.0			+ 0 .4	− 4 .4
30	95	10.9		9.5	8° 5176	−24 .8	− 2 .7	65	160	13.0			− 1 .8	− 4 .8
31	96	10.9				− 7 .3	+11 .7	66*	162	13.1	13.05		+ 3 .6	− 0 .5
32	97	10.9	(10.85)			+13 .5	+ 3 .8	67*	162	13.1			+ 2 .4	− 4 .7
33	98	11.0				− 6 .3	+24 .6	68	171	13.3			+ 5 .7	+ 0 .7
34	101	11.0		9.8	7° 5132	+12 .1	+18 .2	69*		var			0 .0	0 .0
35	101	11.0				+ 9 .4	− 8 .6							

1* HA **74** $7^{M}.81$
2* HA **45** $7^{M}.64$

56*, 62*, 63*, 66*, 67* dpl
69* RS 10^{M} — < 14^{M}; in luce minima apparet duplex

RU Aquilae

20^h 5^m 56^s (1855.0) **+12° 33′.7**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1	0	7.5		$8^M.5$	12° 4241	−36′.2	−16′.3
2	13	7.8	($7^M.84$)	7.8	12° 4265	+33.4	+ 5.3
3	47	8.8		8.5	12° 4264	+30.4	+14.7
4	48	8.8		8.5	11° 4167	−21.7	−35.4
5	51	8.9		9.0	12° 4256	− 8.0	−33.8
6	54	9.0		8.9	13° 4314	+11.0	+31.6
7	59	9.1		9.1	12° 4260	+12.9	−18.7
8	63	9.2	9.29	9.1	12° 4267	+35.4	−10.2
9	68	9.3	9.47	9.1	12° 4258	+ 9.0	− 1.8
10	71	9.4	9.17	9.0	12° 4261	+13.7	+ 1.8
11	75	9.5		9.5	12° 4248	−26.9	−18.3
12	78	9.6		9.2	12° 4254	−18.3	− 5.9
13	82	9.8		9.3	12° 4250	−23.4	+16.9
14	83	9.8		9.4	13° 4312	+ 4.9	+28.2
15	84	9.9	9.91	9.5	12° 4259	+12.0	+ 9.5
16	86	9.9		9.0	12° 4262	+18.8	−18.4
17	90	10.0	9.94	9.4	12° 4255	− 9.2	+ 4.5
18	91	10.0		9.5	12° 4247	−28.8	−30.5
19	91	10.0	10.11	9.5	12° 4257	+ 8.7	+13.1
20	91	10.0		9.5	12° 4243	−30.9	+ 4.7
21	91	10.0				+ 5.1	−21.7
22	91	10.0		9.4	12° 4253	−18.5	+21.7
23	92	10.1		9.4	12° 4249	−26.2	+ 6.5
24	94	10.1		9.5	12° 4244	−30.7	+ 6.7
25	95	10.2		9.5	12° 4252	−18.8	+ 9.1
26	97	10.3		9.5	13° 4294	−25.0	+27.0
27	98	10.3		9.4	12° 4251	−22.3	+23.7
28	98	10.3				−13.4	−14.7
29	99	10.3		9.5	12° 4254[a]	−10.8	− 4.9
30	101	10.4				−25.1	+16.0
31	104	10.6				−25.6	+ 1.9
32	104	10.6				+17.6	− 2.9
33	104	10.6				− 5.6	−23.0
34	107	10.7				−15.2	+19.3
35	109	10.8				−18.4	− 2.3
36	112	10.9				−14.0	− 0.9
37	112	10.9				+20.2	+ 0.8
38	113	10.9				−10.7	−16.4
39	114	11.0	11.23			+ 7.0	+ 1.5
40	115	11.0	10.81			+ 6.9	− 4.3
41	117	11.1				+ 5.5	−14.1
42	120	11.2	11.18			− 1.3	− 4.4
43	121	11.3				+ 9.4	− 1.6

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
44	123	11.4				− 5′.5	−12′.6
45	124	11.5				+ 1.9	+ 6.9
46	126	11.6	$11^M.60$			− 3.0	− 4.4
47	128	11.7				−14.0	− 9.6
48	129	11.8				+12.3	+ 0.2
49*	131	11.9				+16.1	+10.2
50	132	11.9				−12.5	− 7.6
51	133	12.0				+11.2	+ 0.9
52	133	12.0				+ 9.2	− 2.9
53	135	12.1				−10.6	− 3.5
54	136	12.2				− 1.1	−10.6
55	136	12.2				+ 2.6	− 6.1
56	141	12.4	12.45			− 3.7	− 1.0
57	141	12.4				+ 2.6	− 5.5
58	145	12.6				+ 4.3	+ 0.1
59	145	12.6				− 1.7	+ 6.1
60	146	12.6				+ 2.4	− 8.1
61	147	12.7				− 1.1	+ 6.6
62	148	12.7				+ 5.3	+ 0.7
63	149	12.7				− 2.1	+ 5.2
64	150	12.8				+ 7.6	+ 2.4
65	151	12.8				+ 3.1	− 6.6
66	152	12.9				+ 4.7	− 0.3
67	153	12.9				+ 0.8	− 3.6
68	153	12.9				− 3.1	+ 3.2
69	154	12.9				+ 5.1	+ 3.8
70	155	13.0				+ 1.0	− 3.7
71	155	13.0				− 2.1	− 8.6
72	155	13.0				− 6.0	+ 6.0
73	155	13.0	13.01			+ 0.2	+ 2.0
74	156	13.0				− 3.2	+ 2.1
75	158	13.1				− 2.4	− 8.7
76	159	13.2				− 2.0	+ 6.2
77*	159	13.2				+ 2.9	− 3.4
78	161	13.3				+ 2.6	+ 2.6
79	162	13.3				+ 1.8	5.4
80	167	13.6	13.57			+ 2.6	+ 0.6
81	169	13.7				− 2.3	− 1.4
82	169	13.7				− 5.3	− 2.1
83	170	13.8				+ 0.1	+ 0.6
84	177	14.4	14.43			+ 2.2	+ 1.2
85		9.1	9.09	$9^M.2$	12° 4268	+38.8	+ 4.4
86*		10.0	9.99	9.5	12° 4266	+35.0	−17.7
87*		var			12° 4256[a]	0.0	0.0

49*, 77* dpl
86* neb. planet. NGC 6891.
87* **RU** 8^M — $14\frac{1}{2}^M$

201942

UW Cygni

$20^h\ 18^m\ 5^s$ (1855.0) $+42^0\ 46'.7$

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		6.3		$6^{M}.3$	42^0 3721	− 1′.5	−15′.6
2*	0	6.8		7.5	43^0 3571	−27.6	+37.1
3*	3	6.9		6.9	42^0 3740	+25.9	−38.4
4*	18	7.4		7.4	43^0 3566	−37.7	+15.6
5	22	7.5		8.3	42^0 3724	− 0.2	−14.9
6*	25	7.6		7.4	43^0 3576	−19.5	+21.0
7	30	7.7		8.3	42^0 3737	+20.9	−28.3
8	34	7.7		8.2	42^0 3743	+31.6	−33.5
9	37	7.8		8.7	42^0 3725	− 0.1	− 9.7
10	38	7.8		7.8	42^0 3704	−22.2	+ 8.3
11	44	7.9		8.1	42^0 3705	−20.9	−33.1
12	48	8.0		8.2	42^0 3702	26.1	39.9
13*	53	8.1		8.3	42^0 3718	− 2.4	−31.3
14*	55	8.2		8.2	43^0 3573	−21.1	+26.2
15	55	8.2		9.2	42^0 3706	−18.6	− 3.6
16	60	8.3		8.9	42^0 3699	−31.1	−37.2
17	61	8.3		8.9	42^0 3700	−29.8	−39.8
18	66	8.4		8.8	42^0 3714	− 8.2	−24.4
19	66	8.4		9.0	42^0 3726	+ 1.5	+11.4
20	67	8.4		9.2	42^0 3736	+19.1	−17.2
21	69	8.5	$8^{M}.46$	9.1	42^0 3729	+ 3.6	+ 3.5
22	71	8.5		9.1	42^0 3741	+28.7	−36.0
23	73	8.6		9.2	43^0 3586	− 5.1	+21.8
24	74	8.7		8.7	43^0 3599	+27.9	+26.0
25	78	8.9		9.2	43^0 3587	− 4.5	+29.3
26	79	9.0		9.3	43^0 3588	− 4.2	+17.3
27*	79	9.0		9.2	42^0 3738	+20.8	+ 2.5
28	81	9.1		9.3	43^0 3584	− 7.8	+21.9
29	83	9.2		8.5	42^0 3703	−26.3	− 6.6
30	86	9.3		9.3	43^0 3585	− 6.8	+24.5
31	87	9.4		9.4	42^0 3735	+18.4	+ 5.1
32	88	9.4				−18.6	+19.2

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
33	91	9.6				+ 8′.2	+ 7′.9
34	93	9.7		$9^{M}.4$	42^0 3720	− 0.4	−21.9
35	94	9.7		9.5	43^0 3595	+12.6	+13.3
36	95	9.8		9.5	42^0 3730	+ 4.8	−27.6
37	98	10.0		9.3	42^0 3734	+14.9	+ 0.4
38*	100	10.1				− 5.3	+29.3
39	102	10.2				+11.1	+ 1.1
40	104	10.3		9.3	42^0 3708	−18.0	−14.3
41	105	10.3				+14.7	+ 2.1
42	107	10.4				− 4.3	+26.8
43	108	10.5	$10^{M}.48$	9.3	42^0 3728	+ 2.3	+ 6.7
44	113	10.7		9.5	42^0 3713	−11.3	+10.9
45*	117	10.8		9.5	42^0 3711	−11.4	− 4.1
46	118	10.9	10.88	9.3	42^0 3727	+ 2.2	+ 5.1
47*	119	10.9				1.2	− 2.7
48	120	11.0				+ 2.3	−13.8
49*	122	11.1				− 1.2	− 2.7
50	124	11.1				+ 6.6	− 9.9
51	127	11.3				+ 8.3	− 9.8
52	130	11.4				+ 4.6	− 9.6
53	132	11.5	11.55			+ 2.8	− 4.8
54	137	12.0	12.00			− 3.4	2.0
55	140	12.4	12.49			+ 1.2	+ 0.6
56	142	12.5	12.49			− 2.7	+ 0.6
57	145	12.7	12.73			+ 0.1	+ 2.7
58	148	12.8	12.78			− 0.5	+ 1.9
59		11.3	11.27			− 4.8	− 8.3
60		11.8	11.80			6.4	+ 1.2
61		11.9	11.91			− 4.0	+ 5.4
62		12.2	12.19			0.9	− 5.7
63*		13.4	13.40				
64*		var			42^0 3725[a]	0.0	0.0

1* HR $6^{M}.33$ PD $6^{M}.43$ Bu 10180
2* HA 45 $6^{M}.83$ PD $6^{M}.95$ Bu 10146
3* HA 45 6.79 PD 7.12
4* HA 45 7.40 PD 7.75
6* HA 45 7.58 PD 7.86 Bu 10162
13* Bu 10179
14* Bu 10159
27* BD $\Delta\delta = +4'.7$

38* dpl
45* BD $\Delta\delta = -5'.6$
47* + 49* = BD + 42^0 3722, $9^{M}.4$, Bgd. $9^{M}.99$, Bu 10183
63* Graff: $\Delta\alpha = +1^s$, $\Delta\delta = -2'.5$ (1855)
64* UW $10\frac{1}{2}^{M} - 13^{M}$

202954

ST Cygni

20^h 28^m 44^s (1855.0) **+54° 27′.5**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*	0	7.0		$6^M.8$	53° 2435	+ 4′.5	−29′.6
2*	12	7.1		7.0	54° 2374	+ 7.0	− 9.0
3*	32	7.5		7.3	54° 2362	−19.8	−16.0
4*	46	7.8		8.1	54° 2368	−13.2	−21.4
5	51	8.0		8.0	54° 2356	−36.5	−26.3
6	58	8.4		8.0	53° 2441	+28.8	−29.1
7	61	8.5		8.5	54° 2363	−18.6	+ 2.4
8	62	8.6		9.0	54° 2382	+27.6	−21.8
9*	62	8.6		8.6	54° 2364	−17.4	−21.2
10*	67	8.9		8.9	54° 2369	−11.5	+22.4
11*	69	9.0		9.0	54° 2375	+10.0	−24.4
12	69	9.0		9.2	54° 2357	−36.4	−26.0
13*	71	9.2		9.2	54° 2379	+17.6	+18.4
14	73	9.3		9.2	54° 2361	−24.3	+ 9.0
15*	76	9.5		9.2	54° 2383	+26.5	+26.0
16*	77	9.6		9.4	54° 2378	+16.1	−22.0
17	79	9.7		9.3	54° 2365	−16.8	−17.6
18	80	9.8		9.2	54° 2381	+21.8	+22.3
19*	82	10.0	$10^M.14$			− 8.4	− 8.6
20	83	10.0		9.5	54° 2377	+15.7	−16.9
21	84	10.1		9.5	54° 2360	−29.2	− 0.6
22*	85	10.1		9.5	54° 2371	− 9.1	+22.9
23	85	10.1		9.5	53° 2425	−20.4	−28.8
24	85	10.1		9.5	54° 2366	−14.4	−18.7
25	87	10.2	10.10	9.5	54° 2372	− 8.4	+11.0
26	88	10.3		9.5	54° 2370	−10.1	−25.0
27	88	10.3				+ 8.4	−11.6
28	93	10.4	10.67			4.9	−10.7
29	95	10.4				+ 9.4	−11.9
30	95	10.4				+28.6	−22.1
31	96	10.4				−10.8	+ 7.5
32*	96	10.4	10.35	9.5	54° 2376	+11.0	+ 8.8
33	96	10.4				+ 0′.5	−12′.4
34	96	10.4				+20.3	+14.0
35	99	10.5				+19.2	+12.0
36	101	10.5				−10.8	−15.9
37	104	10.6		$9^M.5$	54° 2367	−13.9	+ 8.3
38	108	10.6				−11.8	+ 0.7
39	113	10.7	$10^M.65$			− 5.2	− 0.9
40	114	10.8				+ 5.9	+10.7
41	121	11.0				− 5.9	+14.2
42	127	11.2				+13.1	+11.4
43	132	11.4				+11.1	+11.6
44	135	11.5	11.49			− 0.5	− 4.8
45	135	11.5	11.58			+ 3.1	+ 0.3
46	140	11.7	11.61			+ 5.5	+ 0.7
47	143	11.8				− 4.0	− 3.4
48	146	12.0	11.99			− 0.5	− 3.2
49	149	12.1				+ 6.0	− 2.1
50	154	12.3				+ 4.5	− 1.5
51	156	12.4				− 3.8	− 1.4
52	158	12.4				− 3.3	− 0.9
53	160	12.5				− 2.0	− 4.0
54	161	12.6				− 2.3	4.4
55	164	12.7				− 4.9	+ 2.8
56	168	12.9				− 3.3	− 3.3
57	170	12.9				− 3.4	+ 1.8
58	174	13.2				− 4.2	− 1.4
59	176	13.3				0.0	+ 1.5
60*	179	13.4	13.38			− 0.6	+ 0.9
61	184	13.8	13.84			− 1.6	− 0.7
62*		var			54° 2373[a]	0.0	0.0

1* HA **45** $7^M.06$ PD $6^M.97$ Color = 8^c
2* HA **74** 6.98 PD 7.18
3* HA **74** 7.40 PD 7.71
4* HA **74** 7.73
9* HA **74** 8.89
10* HA **70** 8.89
11* HA **74** 8.83
13* HA **74** 9.20
15* HA **70** 9.53

16* HA **74** $9^M.22$
19* HA **74** 9.63
22* HA **70** 9.99
32* HA **74** 9.87

60* dpl
62* **ST** $9\frac{1}{2}^M$ — $14\frac{1}{2}^M$

205030a & 205230

UX & UY (& AP) Cygni

$20^h\ 49^m\ 44^s$ (1855.0) **$+29^\circ\ 52'.1$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	Δy
1*		6.6		$6^M.7$	29° 4253	+31′.9	− 1′.7	41	48	10.5				+18′.7	+25′.5
2*		7.8		7.7	30° 4218	−28 .6	+32 .0	42	48	10.5				−13 .0	−18 .0
3	0	8.8	$8^M.77$	8.3	29° 4240	+ 7 .4	− 8 .0	43	48	10.5				+11 .9	+28 .8
4	3	8.9		8.5	29° 4256	+35 .1	− 1 .4	44	49	10.6		$9^M.5$	30° 4250	+22 .5	+17 .0
5	5	8.9		8.7	29° 4255	+35 .1	−15 .0	45	50	10.7	$10^M.76$	9.5	29° 4235	− 3 .7	+ 7 .8
6	6	9.0		9.0	30° 4242	+ 8 .0	+25 .8	46	50	10.7				− 3 .5	−17 .8
7	8	9.0		8.3	30° 4259	+34 .3	+12 .1	47	50	10.7		9.5	29° 4223	28 .1	+ 0 .3
8	11	9.1		8.9	30° 4239	− 1 .9	+20 .8	48	51	10.7				1 .6	+20 .5
9	16	9.3		9.2	30° 4223	−23 .0	+21 .1	49	52	10.8				−26 .1	+ 4 .4
10	18	9.4		9.1	30° 4258	+34 .2	+12 .7	50	54	10.9				−19 .0	−17 .8
11	19	9.4		9.4	30° 4231	−15 .8	+20 .6	51	54	10.9				+20 .2	+16 .5
12	22	9.5		9.0	30° 4244	+12 .5	+15 .9	52	56	11.0		9.5	29° 4229	−17 .3	−13 .3
13	22	9.5		9.1	30° 4235	− 7 .4	+23 .3	53	56	11.0				28 .6	−11 .4
14	25	9.6		9.5	30° 4243	+10 .2	+26 .2	54	58	11.1				−23 .4	−19 .7
15	26	9.6		9.0	29° 4251	+23 .3	+ 5 .5	55	58	11.1		9.5	30° 4220	−24 .8	+ 8 .7
16	27	9.6		9.2	29° 4248	+14 .9	+ 0 .9	56	58	11.1		9.5	29° 4225	−26 .6	+ 3 .1
17	33	9.8		9.5	29° 4232	− 7 .6	−19 .5	57	59	11.1				+12 .5	−13 .1
18	34	9.9		9.3	29° 4241	+ 9 .8	−12 .5	58	60	11.2				−28 .2	+ 3 .9
19	34	9.9	9.90	9.3	29° 4243	+10 .8	− 8 .3	59	60	11.2				−22 .7	+18 .3
20	34	9.9		9.2	29° 4250	+23 .9	−14 .1	60	60	11.2	11.23			− 3 .0	+ 2 .7
21	36	9.9		9.4	29° 4252	+26 .7	−14 .8	61	60	11.2				−19 .3	− 0 .9
22	36	9.9	9.92	9.5	29° 4233	− 7 .7	− 5 .5	62	61	11.2				− 8 .0	+ 9 .1
23	37	10.0		9.4	29° 4245	+12 .6	−12 .8	63	61	11.2				− 2 .7	+14 .5
24*	39	10.0				−28 .1	+31 .0	64*	61	11.2				−27 .3	−10 .1
25	40	10.1		9.2	29° 4238	− 0 .7	−21 .9	65	61	11.2				+11 .4	−15 .8
26	41	10.1		9.5	30° 4234	− 9 .3	+25 .7	66	62	11.2				−25 .6	+ 7 .1
27	41	10.1		9.4	30° 4237	− 2 .3	+15 .3	67	62	11.2	11.18	9.5	29° 4244	+12 .5	+ 1 .5
28	41	10.1	10.01	9.3	29° 4237	− 1 .3	− 7 .3	68	63	11.3				−11 .3	+11 .4
29	41	10.1		9.3	29° 4222	−29 .7	−21 .7	69	63	11.3				− 3 .4	+13 .7
30	42	10.1		9.3	29° 4236	− 1 .4	−24 .9	70	64	11.3				+ 6 .5	+ 5 .3
31	44	10.2		9.5	30° 4236	− 6 .0	+18 .6	71	64	11.3	11.34			−15 .3	+14 .9
32	44	10.2				− 0 .7	−21 .6	72	64	11.3				+ 2 .4	+11 .4
33	44	10.2		9.5	30° 4232	−15 .3	+26 .8	73	64	11.3				−25 .9	− 6 .7
34	45	10.3				+ 3 .2	−17 .3	74	66	11.4				+11 .5	16 .3
35	45	10.3				− 9 .4	−19 .6	75	66	11.4				+12 .7	+ 2 .9
36	47	10.4				+26 .9	−23 .0	76	66	11.4				+ 3 .2	− 7 .9
37	47	10.4		9.5	30° 4224	−22 .5	+24 .0	77	66	11.4				−25 .1	− 2 .0
38	47	10.4				−15 .4	−22 .8	78	68	11.4				−25 .8	+ 4 .1
39	47	10.4	10.40			−16 .6	+13 .5	79	68	11.4				−25 .6	− 5 .9
40	48	10.5		9.5	29° 4247	+14 .7	+ 8 .1	80	70	11.5				+ 3 .9	+ 8 .9

1* HA 54 $6^M.62$ PD $6^M.75$
2* HA 24 $7^M.76$ } Bu 10 597
24* comes

64* dpl

Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
81	72	11.5	$11^{M}.42$		+ 8′.5	− 4′.8
82	72	11.5	11.42		−11 .3	+ 1 .6
83	72	11.5			+ 7 .8	+ 9 .1
84*	76	11.6			−28 .2	+ 3 .1
85	76	11.6			−10 .5	+ 3 .6
86	77	11.7			−16 .8	+ 9 .4
87	77	11.7	11.64		− 9 .2	+ 0 .4
88	80	11.9			− 3 .9	+ 8 .9
89	80	11.9			− 3 .8	− 2 .5
90	81	12.0			−12 .7	+ 1 .8
91	81	12.0			− 4 .9	+ 6 .3
92	82	12.1			+ 4 .2	+ 0 .8
93	82	12.1			+ 7 .5	+ 3 .7
94	83	12.1			+ 1 .9	+ 6 .0
95	83	12.1			−16 .5	+15 .5
96	84	12.2			− 9 .6	− 7 .2
97	85	12.3	12.35		− 6 .9	+ 0 .7
98	85	12.3			+ 6 .5	+ 2 .6
99	86	12.4	12.38		+ 6 .4	− 2 .0
100	87	12.5			+ 5 .8	+ 3 .3
101	87	12.5			+11 .4	+ 4 .4
102	87	12.5			+11 .1	+ 1 .9
103	87	12.5			+11 .0	−15 .5

84* dpl

Num.	Grad.	Magn.	Bgd.	BD	1925.0 Δx	Δy
104	89	12.7			− 9′.1	− 6′.6
105	89	12.7			−12 .1	+ 3 .8
106	91	12.9			− 2 .8	− 5 .2
107	92	13.0			− 6 .6	− 0 .7
108	93	13.1			+ 8 .8	+ 1 .4
109	93	13.1	$13^{M}.08$		− 7 .9	− 3 .6
110	94	13.1			− 9 .2	− 5 .1
111	94	13.1			−14 .0	+ 2 .2
112	101	13.4			−16 .5	+11 .8
113	101	13.4			− 7 .6	+ 0 .6
114	102	13.5			+ 3 .8	+ 0 .2
115*	104	13.6			− 4 .9	− 5 .1
116	104	13.6			− 1 .9	− 6 .1
117	108	13.8			− 6 .5	− 4 .8
118	108	13.8			+ 4 .6	+ 0 .5
119	108	13.8			− 2 .2	− 6 .1
120	111	13.9			− 6 .2	− 4 .7
121	111	13.9			+ 7 .0	+ 2 .0
122	116	14.1			− 6 .9	− 2 .7
123	120	14.3			− 7 .1	− 3 .3
124*		var		29^{0} 4231	− 8 .9	− 0 .3
125*		var		29^{0} 4240^{a}	+ 8 .9	+ 0 .4
126*		var			−16 .8	+11 .9

115* dpl
124* UX $7^{1}/_{2}{}^{M}$ — < 14^{M}
125* UY 10^{M} — 11^{M}
126* AP $11^{1}/_{2}{}^{M}$ — $13^{1}/_{2}{}^{M}$

21 1614

X Pegasi

21^{h} 14^{m} 6^{s} (1855.0) **+13° 50′.2**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		6.7		$7^{\mathrm{M}}.2$	13° 4692	+37′.6	−24′.1	36	79	12.0				− 4′.9	+ 9′.8
2	0	7.8		9.0	14° 4605	+39 .3	+21 .6	37	81	12.0				− 9 .2	−16 .2
3	3	8.0	$8^{\mathrm{M}}.00$	8.4	13° 4674	−20 .6	− 5 .7	38	83	12.1				−13 .3	+10 .9
4	4	8.1		8.5	14° 4588	− 5 .6	+29 .2	39	83	12.1				−13 .5	−10 .3
5	9	8.4		8.7	14° 4597	+19 .2	+14 .1	40	85	12.2				+ 2 .7	+10 .6
6	18	9.0	8.97	9.0	13° 4677	+ 0 .9	− 5 .5	41	87	12.3				+ 6 .2	−10 .1
7	28	9.5		9.2	13° 4690	+34 .3	−12 .3	42	87	12.3				−15 .0	−11 .6
8	30	9.6		9.0	13° 4689	+33 .3	− 8 .1	43	89	12.4				− 4 .5	−10 .6
9	33	9.8		9.2	13° 4678	+ 2 .0	−26 .4	44	90	12.4				−12 .7	+ 8 .0
10	34	9.8		9.1	14° 4589	− 0 .1	+28 .3	45	91	12.4				− 1 .5	+ 7 .2
11	34	9.8	9.81	9.3	13° 4682	+ 5 .9	− 1 .3	46	91	12.4				−11 .5	− 4 .0
12	36	9.9		9.4	13° 4683	+ 7 .0	−24 .3	47	93	12.5				−10 .1	13 .3
13	39	10.1	10.14	9.5	13° 4676[a]	− 1 .4	− 6 .2	48	95	12.6				−10 .7	+ 6 .5
14	39	10.1		9.5	14° 4602	+30 .9	+21 .2	49*	97	12.7				− 8 .5	+10 .7
15	41	10.1		9.4	14° 4591	+ 3 .9	+30 .1	50	98	12.7				+ 1 .8	+10 .9
16	44	10.3		9.3	13° 4679	+ 2 .2	−20 .9	51	100	12.8	$12^{\mathrm{M}}.74$			− 3 .7	0 .0
17	44	10.3		9.4	13° 4675	−14 .9	−23 .0	52	104	13.0	12.99			− 1 .6	− 0 .2
18	46	10.4		9.5	13° 4688	+31 .8	− 9 .6	53	104	13.0	13.00			− 8 .8	− 1 .2
19	46	10.4				+14 .8	−17 .0	54	106	13.0				+ 8 .2	+ 1 .3
20	50	10.5				+22 .7	+22 .4	55	106	13.0				+ 7 .9	+12 .6
21	52	10.7		9.5	13° 4687	+23 .4	− 8 .5	56	108	13.1				− 5 .4	− 2 .2
22	53	10.7	10.56			+ 2 .1	+ 5 .9	57	110	13.1				− 4 .3	− 2 .3
23	56	11.0	11.22			−18 .1	− 1 .0	58	111	13.1	13.01			− 2 .3	− 0 .9
24	56	11.0				+21 .5	+21 .3	59	113	13.2				+ 3 .5	− 0 .3
25	57	11.0				−19 .9	+29 .6	60	115	13.3				− 1 .3	+ 9 .7
26	58	11.1				−25 .6	+27 .2	61	121	13.6				− 5 .6	+ 3 .0
27	59	11.2				−23 .1	+29 .9	62	124	13.8				− 0 .1	+ 6 .0
28	60	11.2				+ 8 .8	−14 .0	63	126	13.9				− 6 .9	+ 4 .6
29	62	11.3				−21 .4	− 1 .7	64	129	14.0	14.04			− 3 .9	+ 3 .9
30	65	11.5				+20 .2	−19 .1	65	134	14.1	14.10			− 6 .3	+ 2 .0
31	65	11.5	11.60			−17 .2	− 4 .3	66	138	14.2				+ 6 .5	+ 1 .8
32	67	11.5	11.46			−12 .9	− 6 .5	67	143	14.4				+ 1 .3	+ 4 .1
33	70	11.6				− 4 .5	+13 .1	68	158	(14.8)				+ 2 .6	+ 0 .2
34	73	11.7				− 7 .2	+10 .2	69		15	15			0 .0	− 0 .3
35	75	11.8				+ 5 .0	+14 .6	70*		var			13° 4676[b]	0 .0	0 .0

1* HA 45 $6^{\mathrm{M}}.71$ PD $7^{\mathrm{M}}.14$

49* dpl

70* X 9^{M} — < 14^{M}

214024

RR Pegasi

$21^h\ 37^m\ 56^s$ (1855.0) **$+24^0\ 20'.6$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		4.3		$4^M.1$	24^0 4463	+ 1′.9	+38′.3
2*		6.3		6.8	24^0 4473	+25 .5	+33 .3
3*		6.8		7.0	24^0 4471	+19 .5	+34 .6
4*	0	7.3		8.7	24^0 4457	−13 .2	− 1 .8
5	5	7.5		7.7	24^0 4455	−18 .3	+31 .2
6*	11	7.6	$7^M.64$	7.5	24^0 4459	− 5 .0	+10 .3
7	22	8.0		8.2	24^0 4467	+ 7 .0	−19 .0
8	24	8.0	8.05	7.8	24^0 4465	+ 4 .6	− 8 .6
9	31	8.2		8.2	23^0 4387	+12 .8	−28 .3
10	47	8.6		8.2	23^0 4384	− 2 .9	−25 .3
11	64	9.0		9.1	23^0 4389	+28 .0	−29 .9
12	66	9.0		9.0	24^0 4464	+ 2 .8	−20 .7
13	76	9.3		9.4	23^0 4374	−30 .1	−27 .0
14	80	9.4	9.36	8.8	24^0 4460	− 4 .1	+20 .1
15	83	9.4	9.45	9.3	24^0 4469	+ 7 .9	+22 .0
16	83	9.4	9.39	9.4	24^0 4470	+15 .8	+14 .5
17	86	9.5		9.4	24^0 4453	−28 .0	−20 .5
18	89	9.6		9.2	24^0 4475	+31 .7	−14 .4
19	92	9.7		9.3	24^0 4454	−24 .0	−19 .3
20	97	9.9		9.5	24^0 4474	+26 .5	+12 .9
21	102	10.1		9.4	24^0 4468	+ 7 .9	+11 .9
22	103	10.2	10.17	9.4	24^0 4456	−17 .3	− 0 .8
23	104	10.2	10.14			+ 8 .1	+ 0 .1
24	104	10.2	10.09	9.5	24^0 4466	+ 5 .4	+17 .2
25	105	10.3				−12 .0	− 6 .6
26	106	10.4				−18 .3	−11 .4
27	109	10.6	10.61			+ 3 .2	+21 .9
28	110	10.6		9.5	24^0 4472	+21 .1	−12 .5
29	112	10.7		9.5	24^0 4461	− 3 .1	−20 .0
30	115	10.8				+19 .1	+10 .4
31	116	10.8				+ 0 .1	−29 .4
32	119	10.9				+17 .9	+23 .1
33	120	10.9	10.93			− 3 .2	+ 1 .6
34	122	11.0				+28 .0	−14 .1
35	122	11.0				−11 .4	−11 .4
36	124	11.1				− 1 .5	−16 .1
37	126	11.1	11.20			+ 4 .5	− 0 .5
38	126	11.1				+ 8′.2	+11′.9
39	127	11.2				−11 .0	+27 .0
40	128	11.2	$11^M.16$			− 2 .4	− 0 .2
41	129	11.3				−18 .1	+20 .5
42	130	11.4	11.44			− 1 .7	− 0 .4
43	131	11.5				− 7 .2	+26 .5
44	136	11.9	11.89			+ 0 .7	− 4 .5
45	137	11.9				13 .1	+15 .6
46	137	11.9				−19 .4	+ 4 .1
47*	142	12.0				+13 .0	0 .0
48	143	12.1				−14 .1	+ 5 .6
49	146	12.1				−10 .0	+13 .6
50	146	12.1				− 4 .0	− 7 .3
51	148	12.2				− 4 .4	+14 .6
52	149	12.2				+14 .5	−12 .4
53	150	12.2				− 9 .8	+ 7 .8
54	152	12.3				− 0 .4	+10 .2
55	153	12.3				+ 6 .7	−11 .3
56	156	12.3				+10 .9	−11 .9
57	158	12.4				− 0 .9	+ 8 .4
58	160	12.4				+ 7 .2	+ 7 .3
59	160	12.4	12.31			− 5 .5	+ 2 .9
60	164	12.5				− 2 .4	+ 8 .1
61	165	12.6	12.75			+ 2 .4	+ 0 .3
62	165	12.6				8 .9	+ 2 .7
63	169	12.6				− 8 .8	+ 1 .5
64	174	12.7				+ 1 .9	+ 2 .9
65	179	12.8				− 9 .1	+ 0 .2
66	182	12.8				− 8 .3	+ 0 .8
67	184	12.9	12.92			− 1 .5	− 1 .3
68	186	12.9	12.83			− 1 .4	− 2 .8
69	193	13.0				− 1 .8	− 0 .8
70		13.3	13.30			− 3 .2	+ 0 .3
71		14.1	14.13			+ 1 .4	− 2 .1
72*		var			24^0 4462	0 .0	0 .0

1* HR $4^M.27$ PD $4^M.24$ Bu 11222
2* HA **74** $6^M.31$ PD $6^M.45$ Color = 7^C
3* HA **74** $6^M.81$ PD $6^M.87$
4* Color = 6^C
6* HA **24** $7^M.86$ PD $8^M.12$

47* dpl
72* **RR** $8^1/_2{}^M$ — 14^M

215543

UZ Cygni (& RT Lacertae)

$21^h\ 53^m\ 25^s$ (1855.0) **+43° 40′.0**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1*		5.5		$6^M.0$	43° 4119	+39′.7	+17′.5
2*	0	7.5		7.5	43° 4108	+14.7	−15.3
3*	5	7.6		7.5	43° 4096	− 9.2	−12.8
4	9	7.7		7.8	43° 4116	+30.5	− 1.1
5	16	8.0		7.6	43° 4106	+ 9.0	+11.5
6	20	8.1		8.0	43° 4098	− 7.0	+20.0
7	22	8.2	$8^M.18$	8.5	43° 4109	+15.3	−19.4
8	23	8.2		8.1	43° 4111	+22.4	+19.3
9	28	8.5		9.0	43° 4099	− 2.2	− 6.8
10	36	9.1		9.0	43° 4094	−10.2	− 3.7
11	37	9.2	9.23	9.2	43° 4097	− 7.6	− 4.2
12	43	9.3	9.25	8.6	43° 4105	+ 8.7	−10.1
13	47	9.5		9.1	43° 4092	−27.4	−10.2
14	47	9.5		9.3	43° 4091	−28.5	−25.7
15	49	9.7		9.2	43° 4104	+ 2.2	+16.2
16	50	9.8		9.5	44° 4001	−11.3	+25.5
17	53	10.1		9.4	44° 3998	−13.8	+23.6
18	53	10.1		9.5	43° 4113	+26.3	−15.3
19	56	10.3				−27.8	− 7.8
20	57	10.3		9.5	43° 4114	+28.7	+27.5
21	57	10.3	10.29			+26.8	−30.4
22*	58	10.3				+ 2.6	+ 3.9
23	60	10.4		9.2	43° 4103	+ 0.4	−16.8
24	64	10.5				+27.4	+ 0.6
25	64	10.5		9.5	43° 4100	− 1.3	+14.1
26	66	10.5				+17.6	+ 3.3
27	69	10.6	10.68	9.1	43° 4101	+ 0.5	− 0.4
28	70	10.6	10.49			− 3.6	−10.3
29	70	10.6				−20.2	+22.6
30	72	10.9				+ 3.7	+14.7
31	73	11.0				−22.7	+ 1.6
32	74	11.2				− 7.0	− 5.4
33	74	11.2	11.20			+ 5.9	− 9.8
34	74	11.2		9.3	43° 4095	− 9.2	+ 1.4
35	76	11.3				−12.2	+ 3.2
36	77	11.3				+ 3.1	+ 8.9
37	78	11.4				− 3.4	− 6.9
38	79	11.4				−10.5	+13.6
39	80	11.5				+12.6	+ 0.2
40	80	11.5				−12.6	+ 8.8
41	82	11.6				+13.2	+ 3.1
42	82	11.6				−10.8	− 8.3
43	83	11.7				+ 9′.2	+ 2′.7
44	85	11.8				−14.7	+ 8.3
45	86	11.8				− 0.9	+ 8.3
46	86	11.8				−12.1	−13.7
47	86	11.8				+10.6	− 2.4
48*	89	12.0	$11^M.98$			+ 6.1	+ 0.3
49	90	12.0				− 1.5	− 6.5
50	90	12.0				− 6.3	− 9.8
51	90	12.0				− 9.3	+ 1.3
52	91	12.1				+ 4.7	+ 9.8
53	92	12.2				+ 9.0	+ 3.1
54	92	12.2				−12.2	− 4.5
55	94	12.3				−10.9	+ 6.7
56	94	12.3				+ 3.6	+ 5.1
57	96	12.4				−11.2	11.6
58	96	12.4				− 9.5	−12.2
59	96	12.4				−11.0	+ 6.9
60	96	12.4				− 6.1	+ 9.4
61*	98	12.5	12.59			+ 0.5	− 2.6
62	98	12.5				− 3.0	+10.9
63	98	12.5				− 5.7	+ 6.9
64	101	12.5	12.36			+ 2.1	+ 0.6
65	103	12.6				+ 1.7	− 5.6
66	103	12.6				10.5	+ 9.4
67	105	12.8				+ 4.2	− 4.7
68	106	12.8				− 5.5	+ 0.9
69	106	12.8				− 8.4	+ 2.2
70	107	12.9	13.01			+ 3.0	+ 1.1
71	108	12.9	12.79			− 1.8	− 3.1
72	110	13.1				+ 3.2	− 4.0
73	111	13.2				− 4.9	+ 2.0
74	113	13.4	13.39			+ 2.9	− 1.4
75	113	13.4				− 2.9	+ 0.6
76	115	13.5				− 2.9	+ 3.1
77	115	13.5				− 6.9	− 1.6
78	120	13.8				+ 5.3	1.4
79	125	14.0				− 1.2	+ 0.6
80	128	14.2				+ 0.8	− 2.0
81		9.8	9.78	$9^M.1$	42° 4271	+23.5	−40.3
82*		var			43° 4100ᵃ	0.0	0.0
83*		var			43° 4112	+24.4	−28.2

1* HR $5^M.52$ PD $5^M.76$ Bu 11459
2* HA 45 $7^M.50$ PD $7^M.46$
3* HA 45 $7^M.62$ PD $7^M.84$
22* Hartwig: var

48*, 61* Hartwig: var
82* UZ Cyg. 10^M — 12^M
83* RT Lac. 9^M — 10^M

233956

Z Cassiopeiae

$23^h\ 37^m\ 30^s$ (1855.0) **$+55^\circ\ 46'.6$**

Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy	Num.	Grad.	Magn.	Bgd.	BD		1925.0 Δx	1925.0 Δy
1	0	8.1	$8^M.13$	$8^M.6$	55° 3011	+ 2′.4	− 7′.5	51	84	11.1				15′.1	−20′.8
2	1	8.2		8.3	55° 3003	15 .3	− 8 .8	52	84	11.1				+10 .7	− 4 .9
3	8	8.5	8.55	8.5	55° 3004	− 8 .7	−12 .9	53	87	11.2				+ 4 .5	− 4 .4
4	10	8.6	8.59	9.1	55° 3006	− 4 .0	−13 .1	54	90	11.3	$11^M.23$			+ 5 .1	− 8 .1
5	19	8.8		9.1	56° 3065	−22 .7	+19 .4	55	92	11.3	11.44			− 4 .4	0 .0
6	22	8.9		9.1	55° 3000	−20 .6	−10 .0	56	93	11.4	11.46			+ 0 .7	2 .0
7	26	9.0		9.1	56° 3069	−17 .5	+29 .5	57	97	11.5	11.66			+ 5 .4	+ 5 .0
8	27	9.0		9.1	56° 3063	−23 .9	+18 .2	58	98	11.5				+ 5 .9	− 5 .2
9	28	9.0	9.03	9.2	55° 3016	+11 .8	+ 2 .1	59	99	11.5	11.27			− 8 .6	− 8 .0
10	32	9.1		9.3	56° 3089	+22 .1	+18 .2	60	101	11.6	11.50			+ 7 .4	+ 5 .4
11	34	9.2		9.3	55° 3014	+11 .2	−29 .9	61	106	11.8				+ 9 .8	− 0 .5
12	37	9.3		9.1	55° 3018	+23 .4	+ 1 .1	62*	106	11.8	11.82			− 1 .5	− 3 .1
13	43	9.6		9.5	55° 3013	+10 .4	−16 .9	63	107	11.8				− 6 .9	+13 .6
14	46	9.8	9.74	9.2	55° 3007	− 3 .4	+ 3 .3	64	109	11.9				+ 8 .5	−12 .5
15	47	9.8				+14 .5	−26 .0	65	109	11.9				−11 .9	+ 5 .3
16	47	9.8		9.3	56° 3074	−13 .3	+24 .6	66	110	11.9				+13 .9	+ 4 .5
17	51	10.1		9.5	55° 3012	+ 5 .0	−17 .1	67	112	11.9				+ 7 .6	− 8 .6
18	51	10.1		9.4	56° 3066	−21 .5	+23 .6	68	112	11.9				+10 .3	+ 1 .8
19	52	10.2		9.5	55° 3002	−17 .1	+ 0 .3	69	114	12.0				+ 3 .6	− 6 .0
20	52	10.2		9.4	56° 3092	+24 .9	+17 .3	70	116	12.1				+ 7 .2	+ 0 .4
21	53	10.2		9.4	56° 3068	−20 .6	+24 .9	71	116	12.1				−13 .7	+13 .9
22	55	10.3				− 2 .6	−12 .6	72	116	12.1				+ 8 .4	− 7 .7
23	55	10.3				− 4 .6	−12 .2	73	118	12.1				+ 7 .9	+ 0 .5
24	57	10.4	10.52	9.5	55° 3015	+11 .3	+ 5 .3	74	119	12.1				−11 .3	− 1 .3
25	60	10.5				− 5 .1	−22 .5	75	120	12.2				+ 7 .0	−10 .3
26	60	10.5	10.50	9.5	55° 3003ª	−12 .1	−11 .4	76	123	12.2				− 6 .0	+12 .4
27	60	10.5		9.4	56° 3062	−24 .9	+18 .7	77	126	12.3				+ 9 .2	+ 2 .4
28	61	10.6				+13 .5	− 6 .9	78	127	12.4				+ 2 .6	−11 .5
29	63	10.6				− 0 .1	−17 .5	79	127	12.4				−13 .6	− 9 .1
30	63	10.6				−20 .6	− 0 .3	80	127	12.4				−10 .5	− 7 .9
31	64	10.6				+11 .1	−19 .6	81	130	12.4				− 3 .4	+ 6 .8
32	65	10.7				− 0 .2	−18 .9	82	131	12.5				− 2 .2	+ 7 .4
33	65	10.7		9.5	55° 2999	−25 .1	−15 .0	83	133	12.5				− 9 .0	− 3 .7
34	67	10.7				− 4 .8	+14 .0	84	135	12.6				−14 .2	− 6 .3
35	68	10.7				−21 .7	−10 .0	85	136	12.6	12.58			− 3 .0	− 5 .2
36	70	10.8				+22 .3	+ 1 .0	86	139	12.7				− 7 .8	− 2 .5
37	74	10.9				+11 .0	+21 .1	87	142	12.9				− 6 .1	+ 0 .1
38	74	10.9				− 5 .6	+11 .4	88	145	13.0	13.05			− 1 .5	− 2 .3
39	74	10.9				−13 .7	−26 .2	89	150	13.2				+ 1 .0	− 2 .8
40	77	11.0				− 3 .1	+11 .6	90	150	13.2				− 7 .3	− 3 .2
41	77	11.0				−14 .4	−18 .7	91	153	13.3				− 3 .6	+ 0 .2
42	77	11.0				+27 .0	+17 .2	92	154	13.3				+ 0 .8	− 5 .9
43	79	11.0				− 2 .3	+21 .5	93		13.9	13.94			− 2 .0	+ 1 .6
44	79	11.0				−16 .4	−23 .5	94*		[13.5]				+ 0 .6	+ 0 .6
45	80	11.0		} 9.5	55° 3001	−16 .9	+11 .5	95*		[13.6]				+ 0 .5	+ 0 .9
46	81	11.1				−16 .8	+ 9 .8	96*		[13.9]				− 0 .3	− 0 .2
47	81	11.1				− 1 .2	−21 .0	97*		[13.9]				− 0 .4	− 1 .4
48	81	11.1				−14 .9	−11 .1	98*		[14.2]				− 0 .8	− 0 .2
49	82	11.1		9.5	56° 3086	+21 .2	+13 .5	99*		[14.7]				+ 0 .1	+ 0 .4
50	84	11.1				−17 .9	+15 .0	100*		var			55° 3009ª	0 .0	0 .0

62* dpl

94*—99* magnitudines ex Parkhurst, *Res.* p. 162

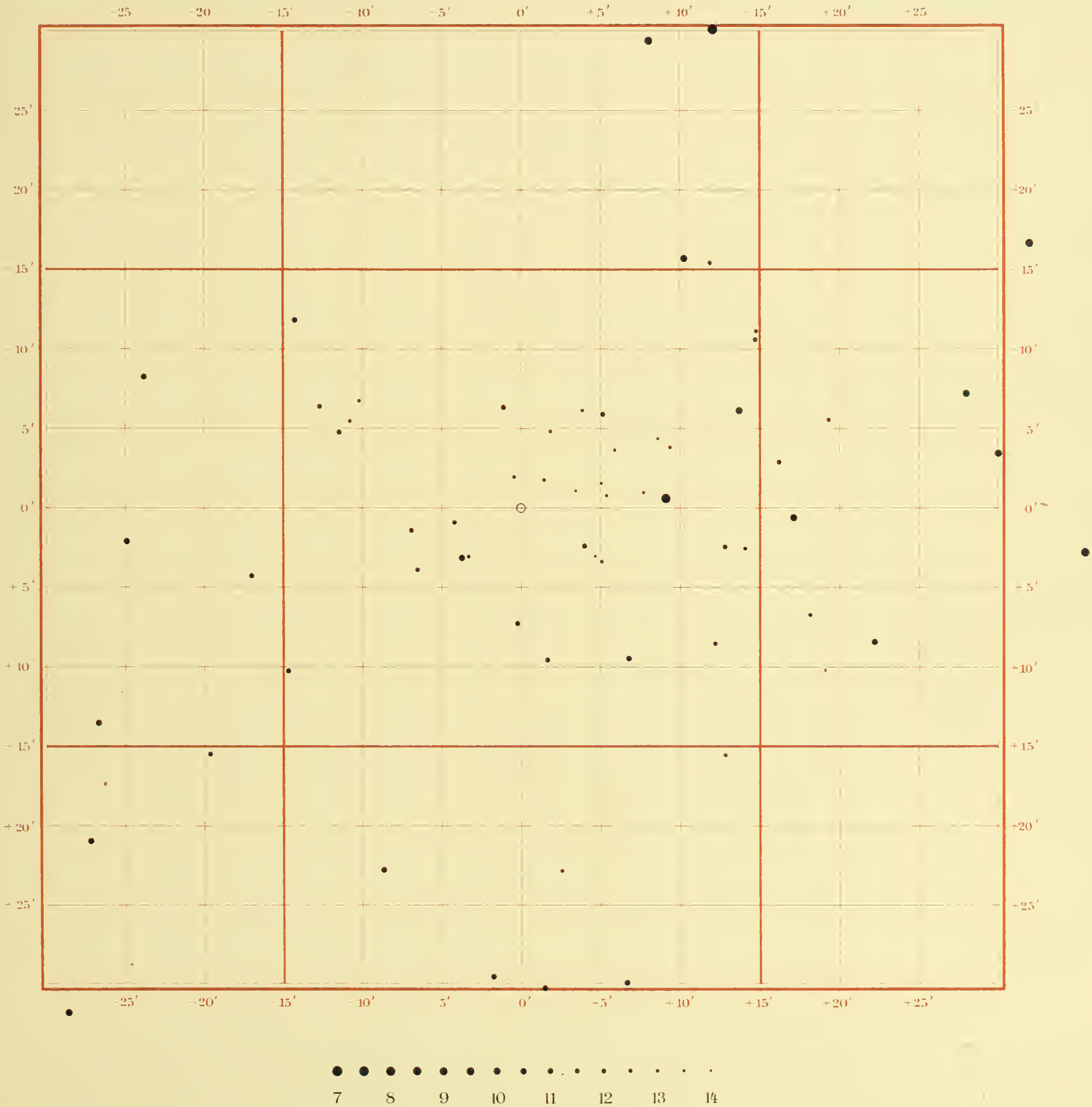
100* Z $8^1/_2{}^M$ — 15^M

054974

V Camelopardalis

(1925.0) 5^h 52^m 40^s $(+7\overset{s}{.}89)$ $+74°$ $30'.2$ $(+0'.01)$

Spectrum Me Magn. 8—<15



Series VII

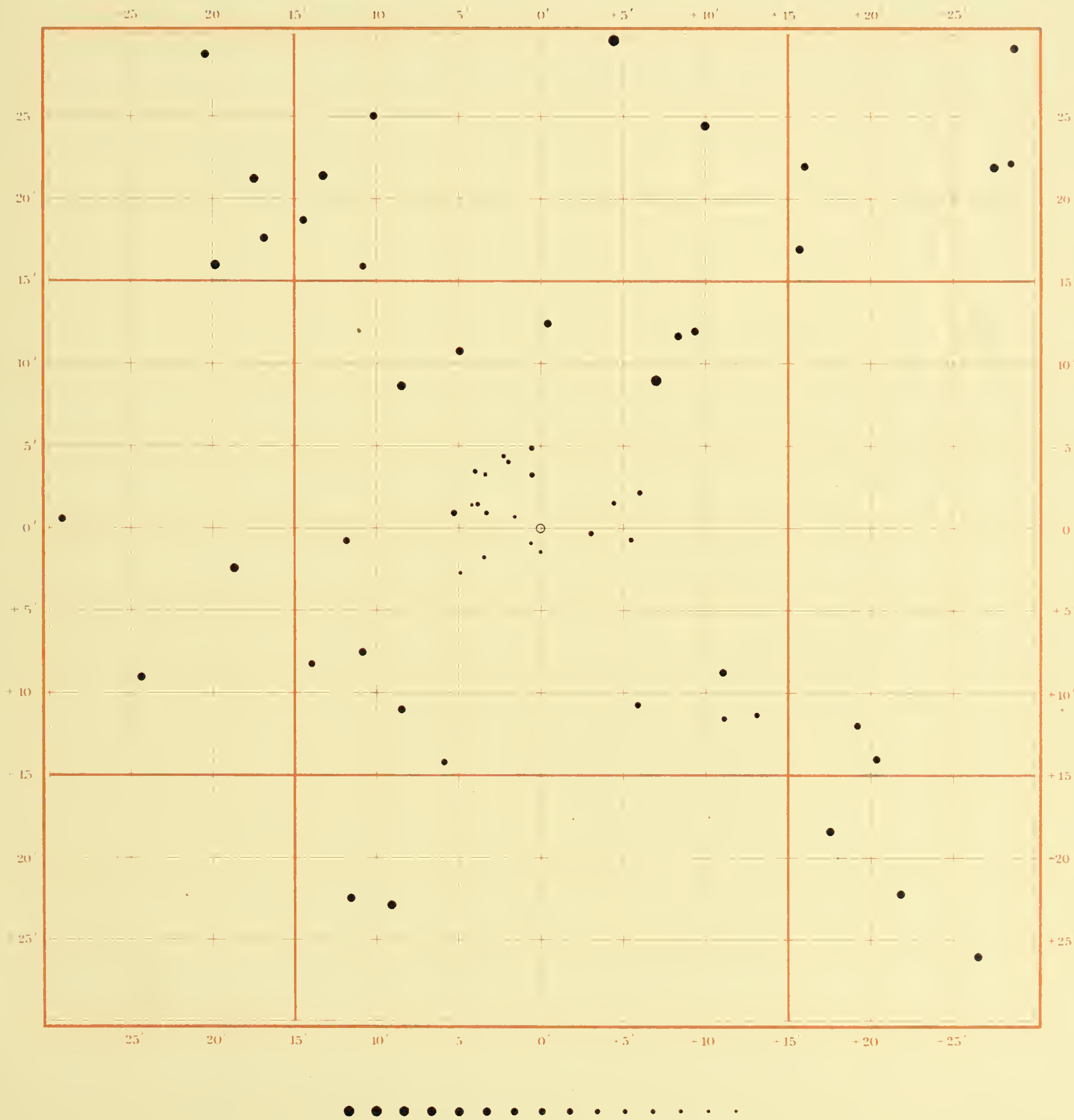
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

202954

ST Cygni

(1925.0) 20^h 30^m 35^s (+1^s.58) +54° 41′.7 (+0′.20)

Spectrum Me Magn. $9\frac{1}{2}$—<14



7 8 9 10 11 12 13 14

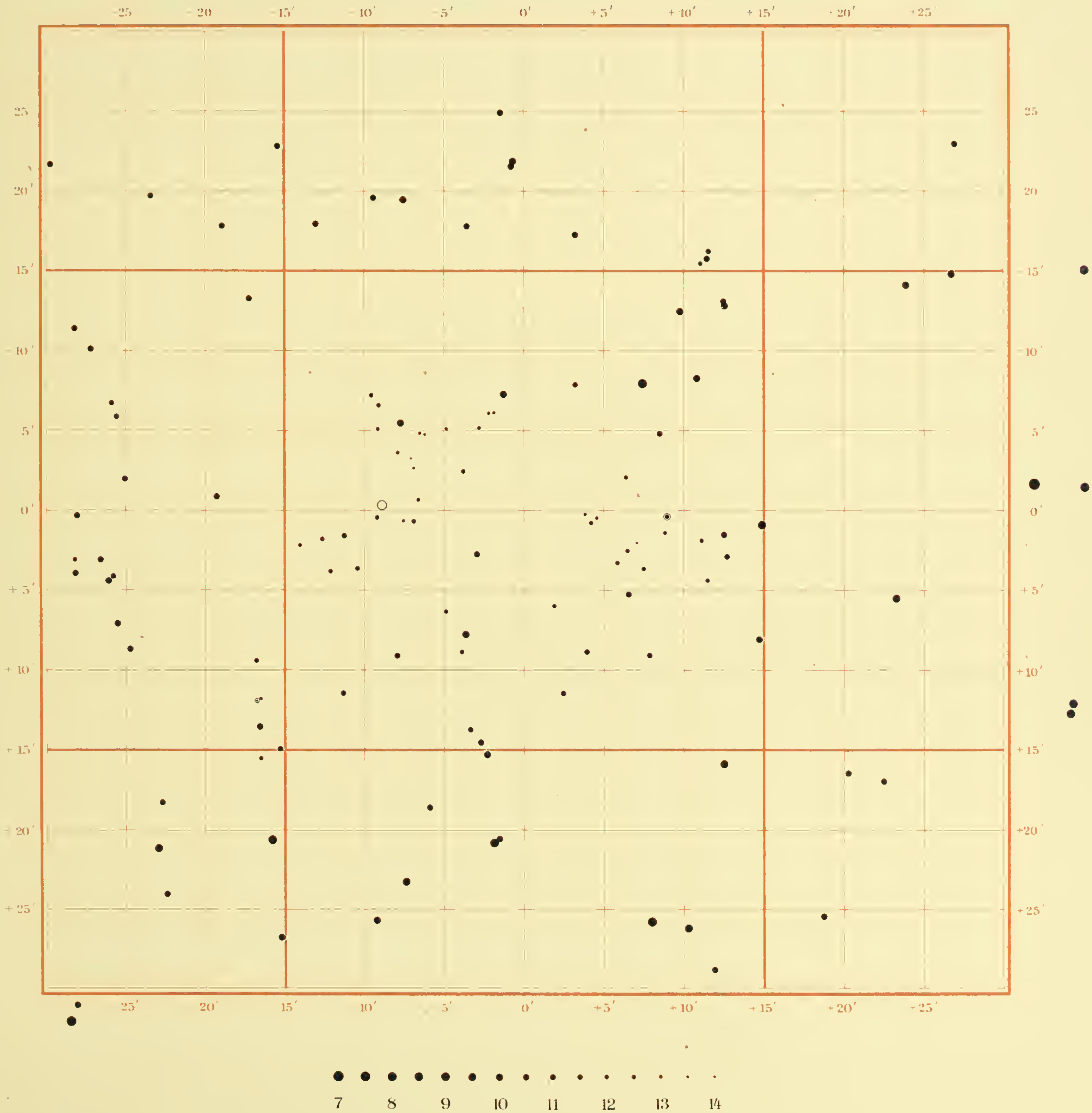
Series VII

205030a & 205230

UX & UY (& AP) Cygni

(1925.0) $20^h\ 52^m\ 39^s\ (+2\overset{s}{.}51)\quad +30^\circ\ 8\overset{\prime}{.}0\ (+0\overset{\prime}{.}23)$

Spectrum Me, F? Magn. 8—<14, $9\frac{1}{2}$—$10\frac{1}{2}$, (12—14)



Series VII

SPECOLA VATICANA, ROMA

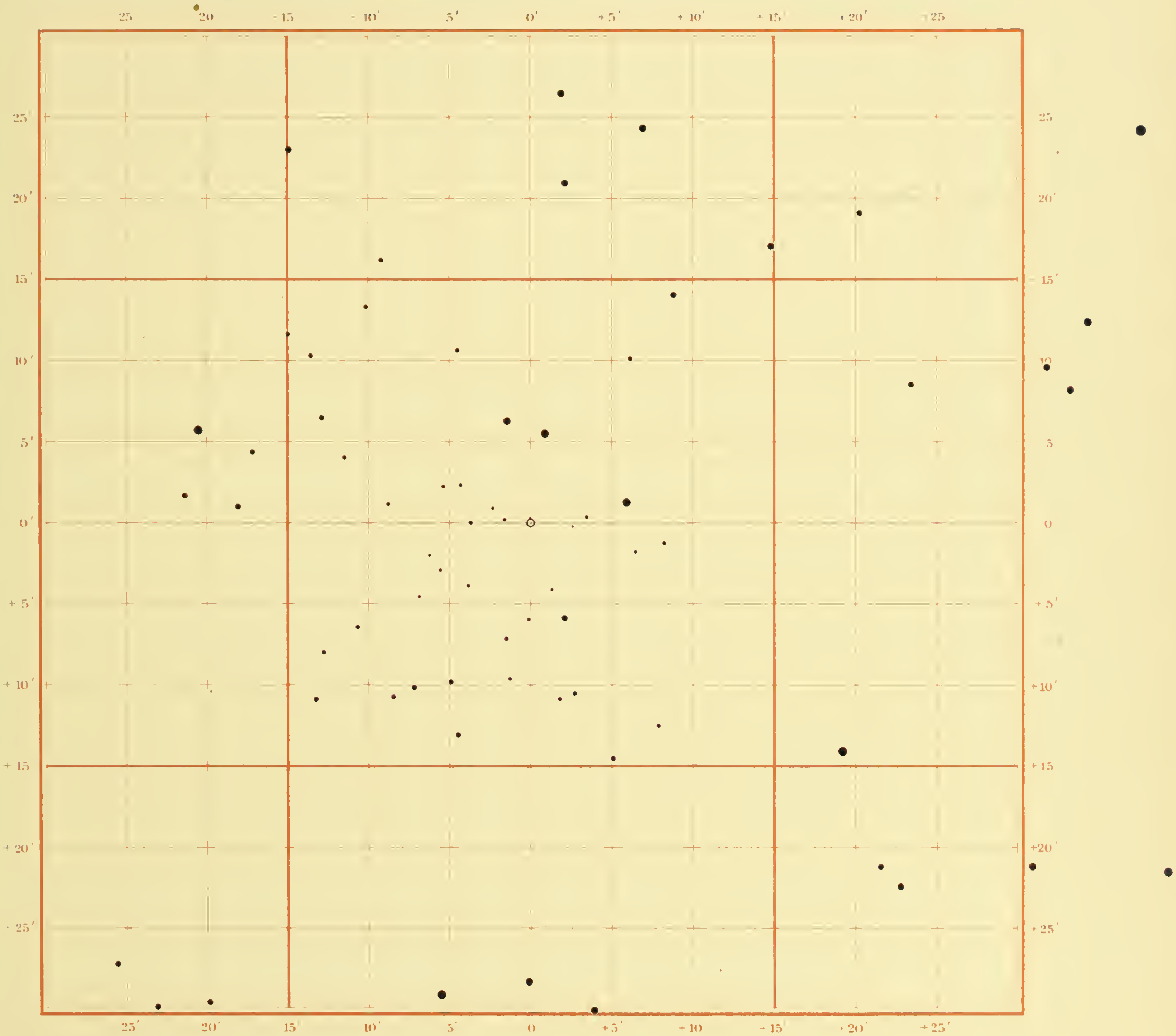
GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

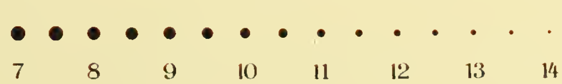
211614

X Pegasi

(1925.0) $21^h\ 17^m\ 26^s$ $(+2^s.85)$ $+14^\circ$ $7'.9$ $(+0'.25)$

Spectrum M Magn. 9—<14





Series VII

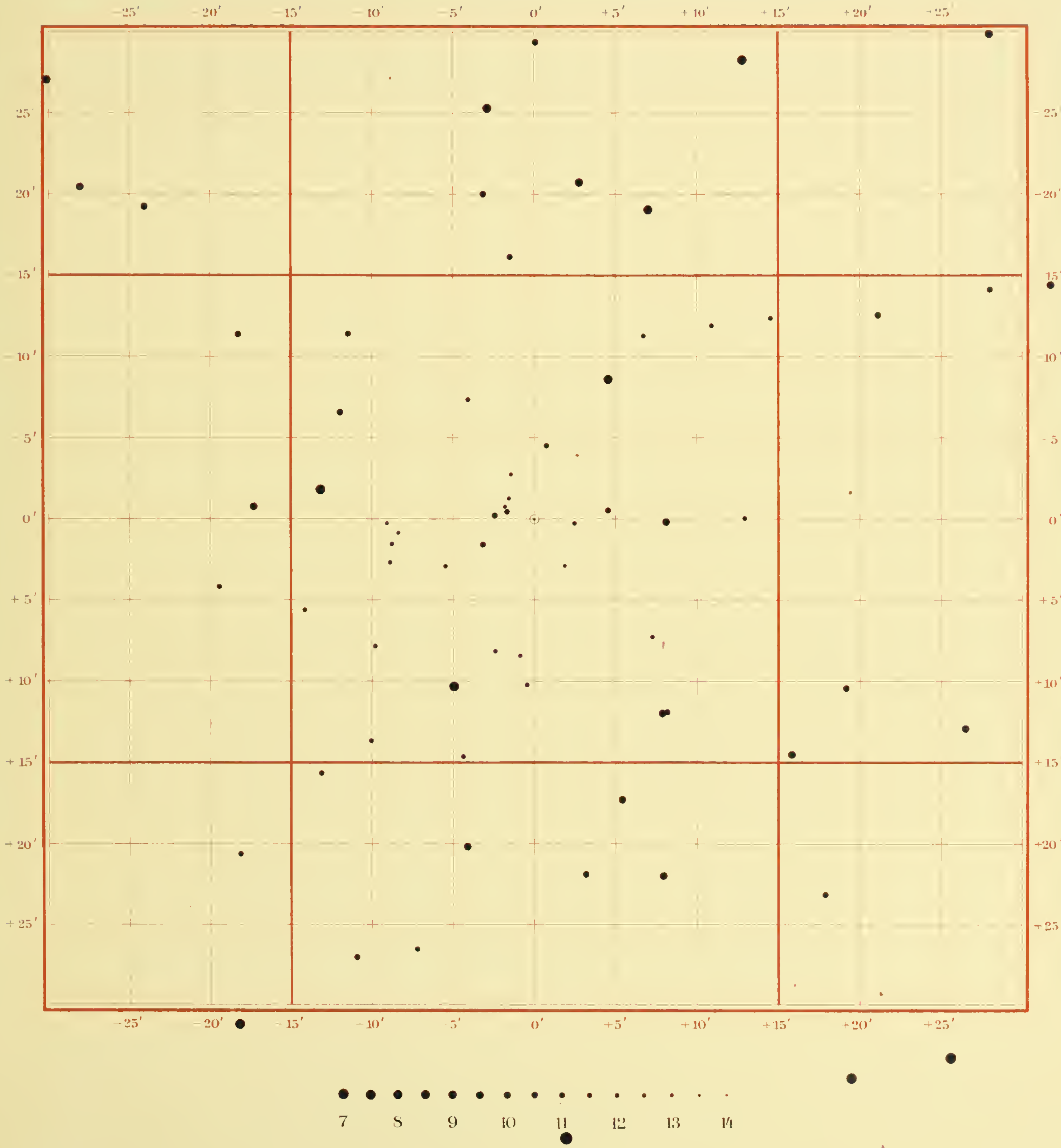
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

214024

RR Pegasi

(1925.0) $21^h\ 41^m\ 6^s$ $(+2^s.72)$ $+24°\ 39'.7$ $(+0'.27)$

Spectrum Me Magn. $8\frac{1}{2}$—14



Series VII

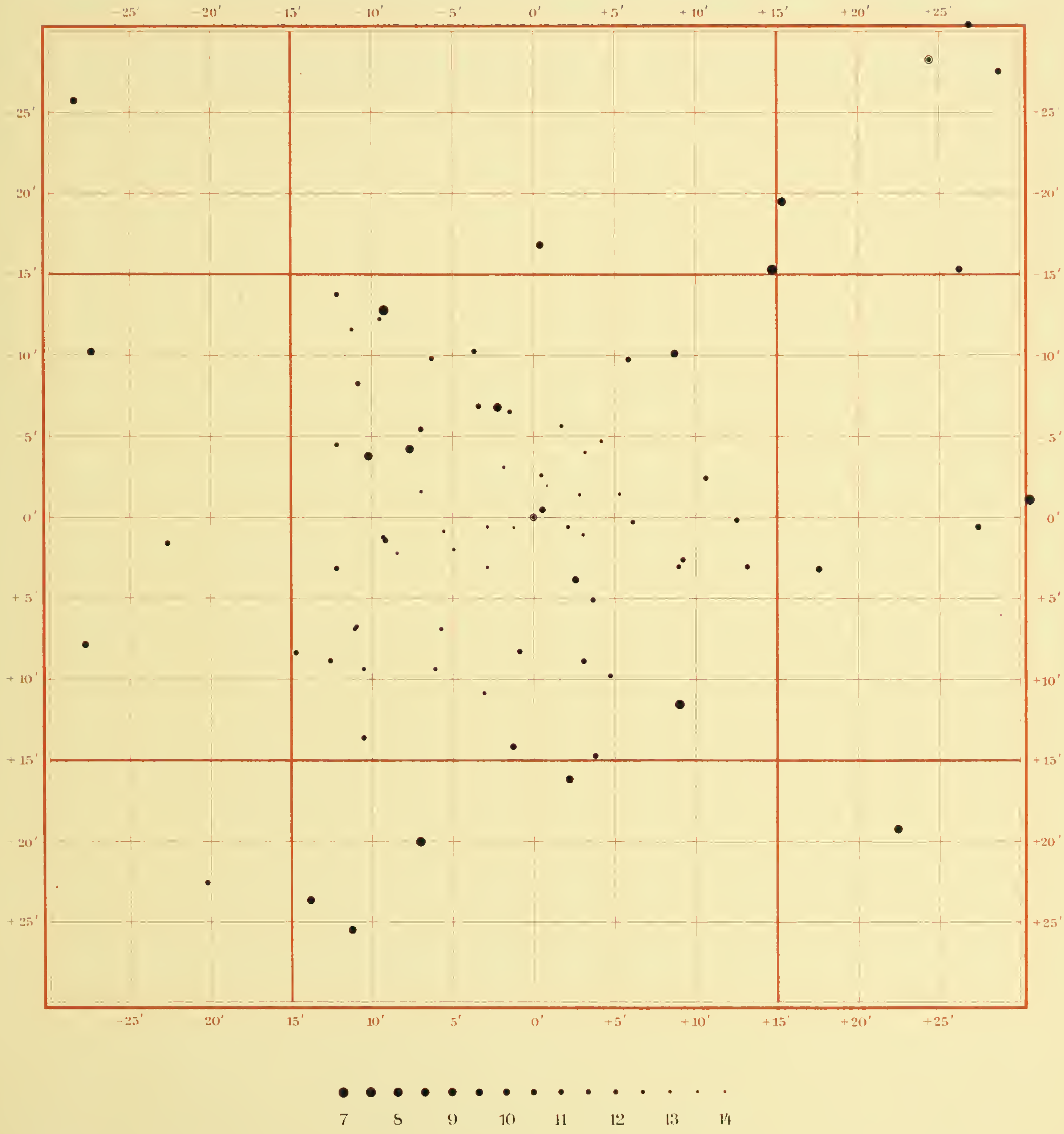
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

215543

UZ Cygni (& RT Lacertae)

(1925.0) $21^h\ 56^m\ 13^s$ $(+2^s.41)$ $+44°\ 0'.0$ $(+0'.29)$

Spectrum A, (G5) Magn. 10—12, (9—10)



Series VII

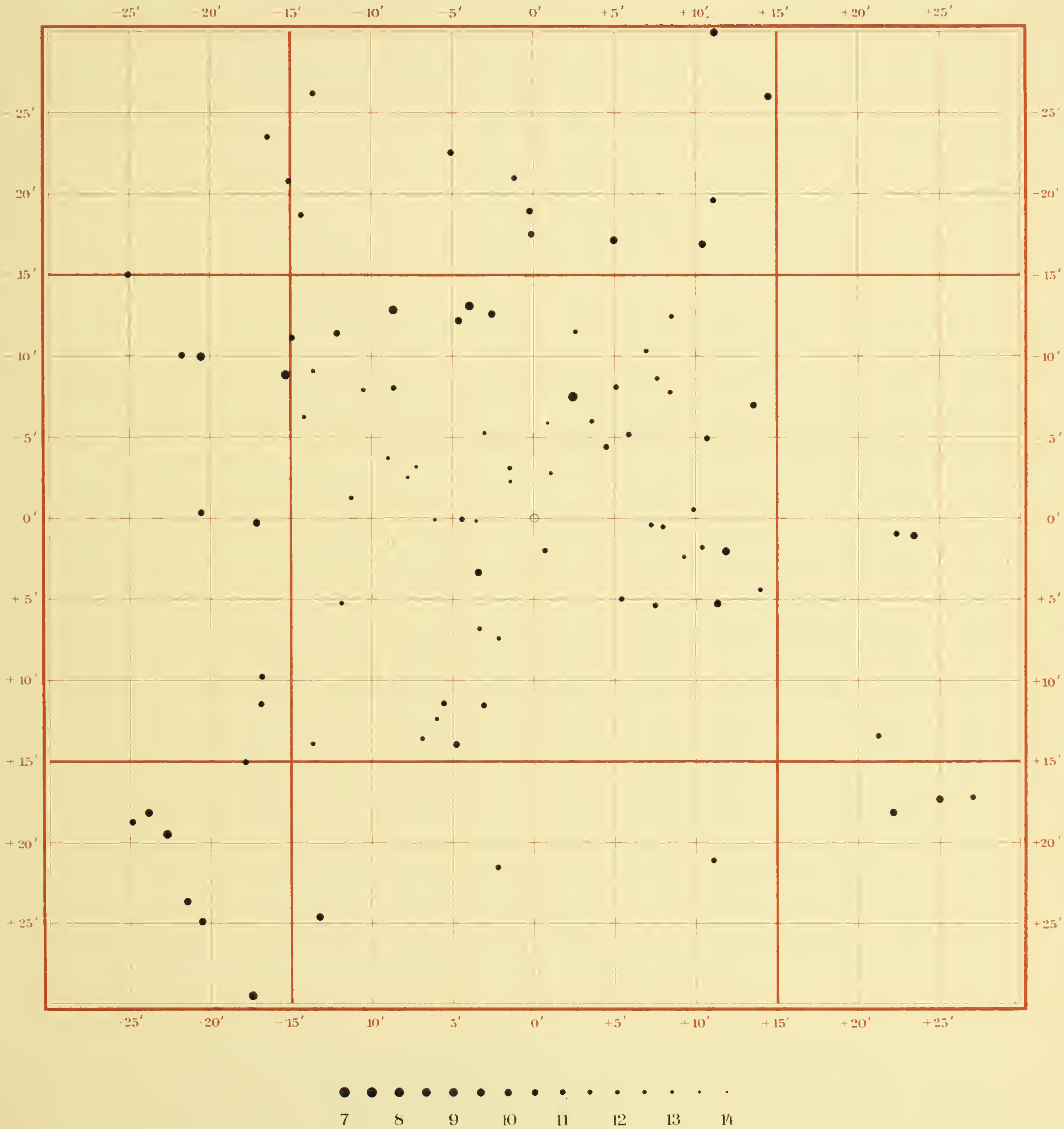
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

233956

Z Cassiopeiae

(1925.0) 23^h 40^m 52^s (+2^s.91) +56° 9′.9 (+0′.33)

Spectrum Me Magn. 8½—15



Series VII

SPECOLA VATICANA, ROMA

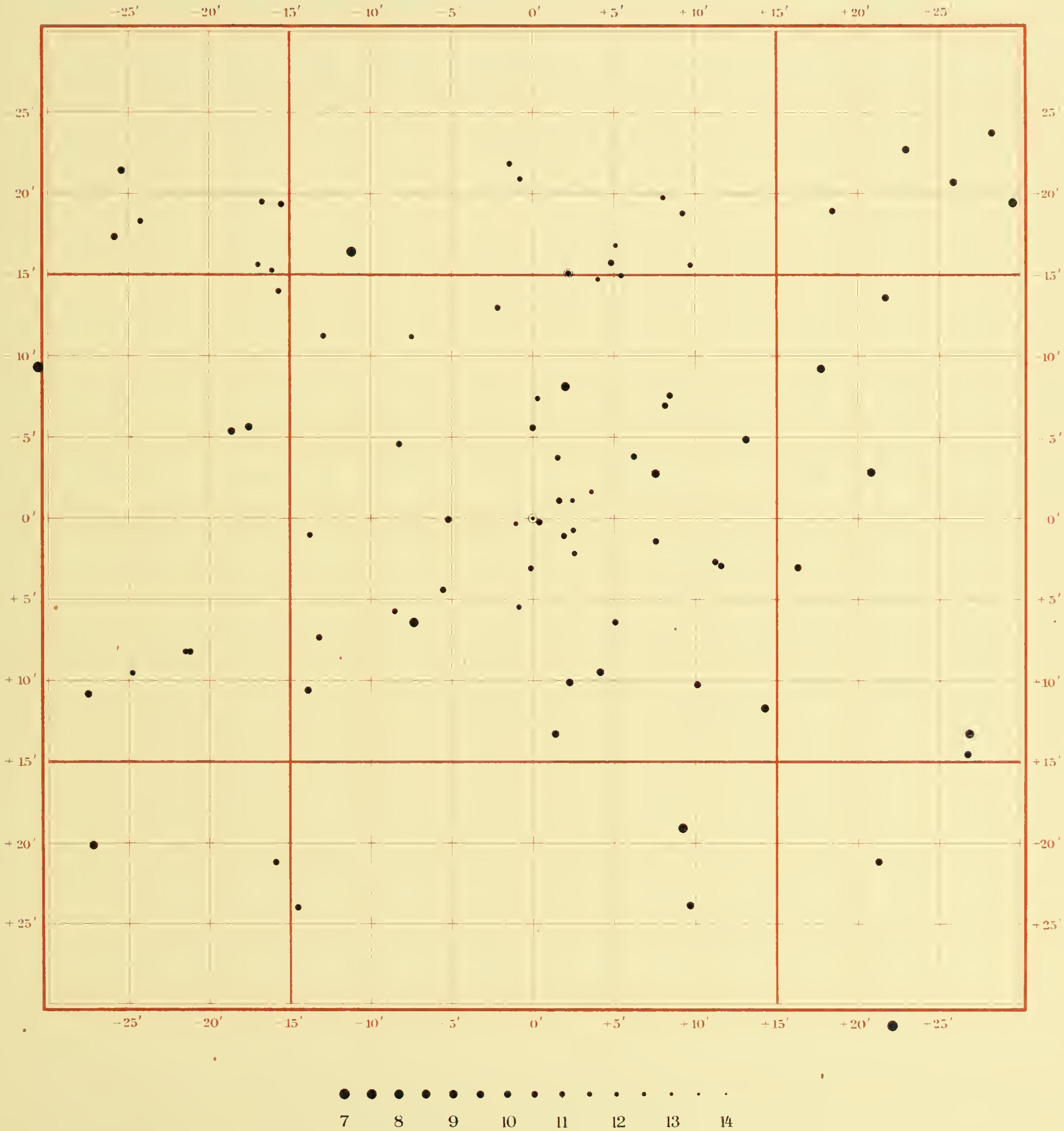
GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

072820b

Z (& X) Puppis

(1925.0) $7^h\ 29^m\ 22^s\ (+2\overset{s}{.}61)$ $-20°\ 29\overset{'}{.}8\ (-0\overset{'}{.}13)$

Spectrum M7e, (G5) Magn. $7\frac{1}{2}$—14, (8—9)



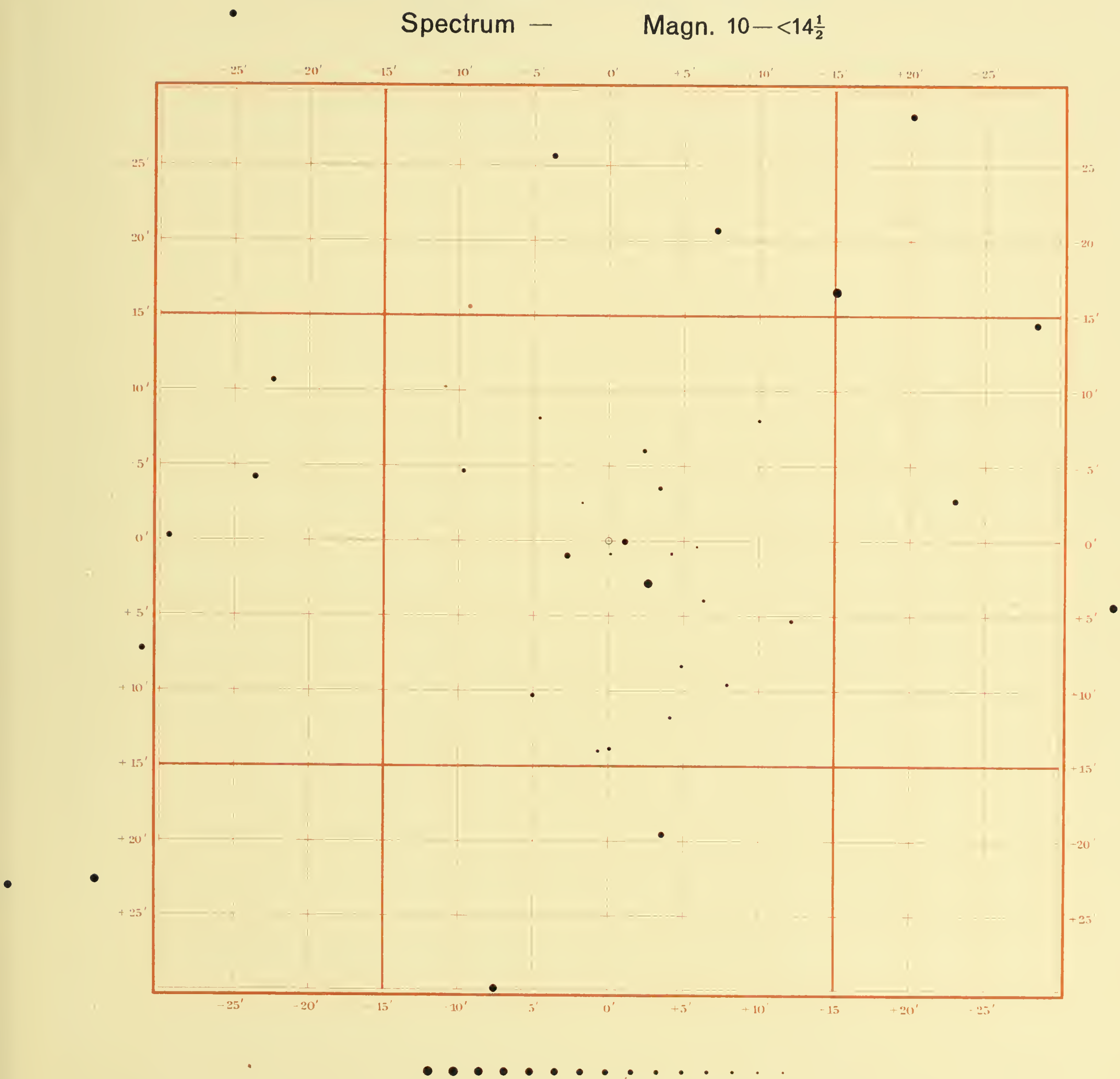
Series VII

130212

RV Virginis

(1925.0) $13^h\ 3^m\ 58^s$ $(+3^s.16)$ $-12^\circ\ 45'.9$ $(-0'.32)$

Spectrum — Magn. 10—<14½



7 8 9 10 11 12 13 14

Series VII

SPECOLA VATICANA, ROMA

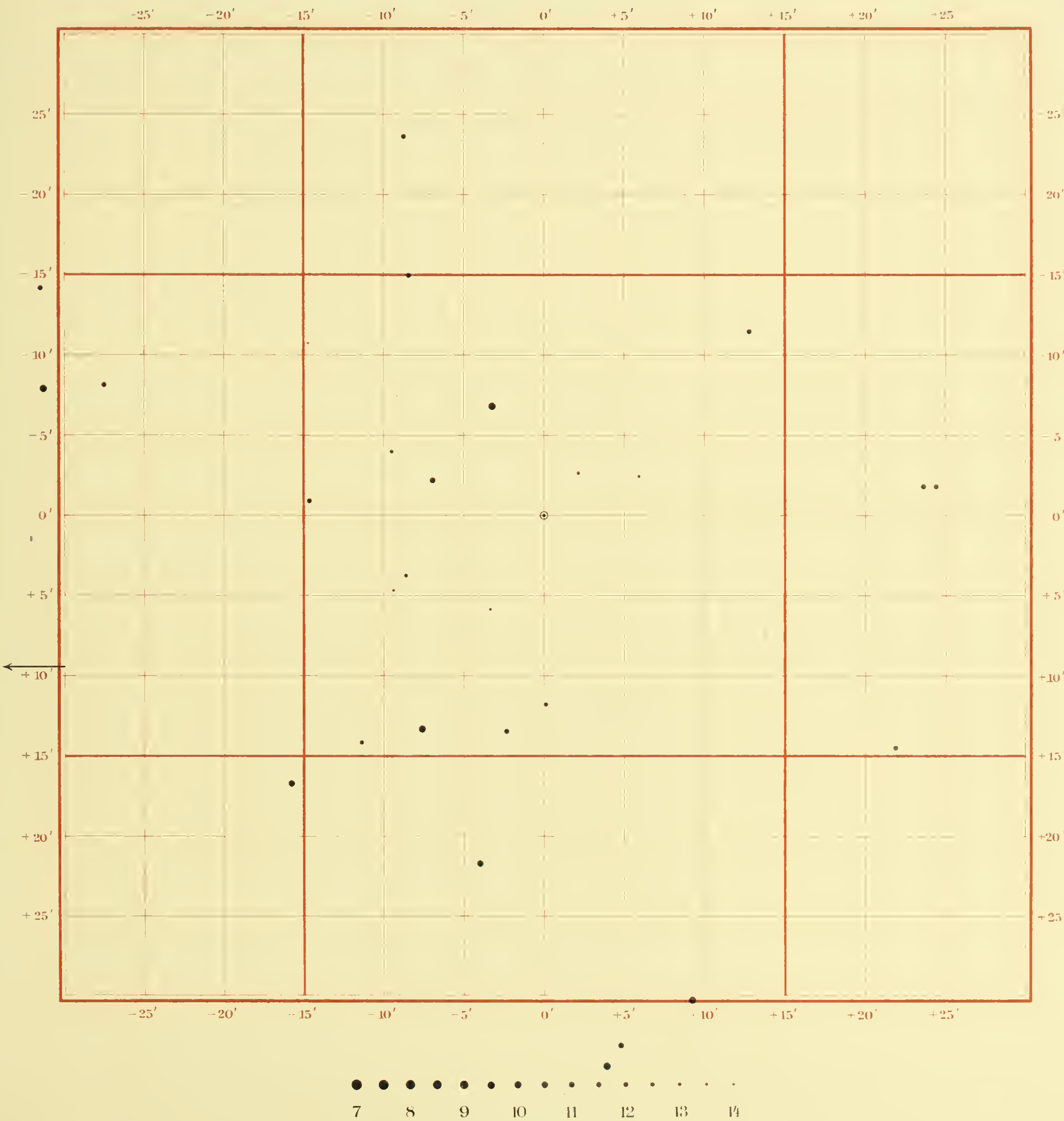
GRAPH. INSTITUT JULIUS KLINKHARDT LEIPZIG

140113

Z Bootis

(1925.0) 14^h 2^m 52^s (+2^s.90) +13° 50′.5 (−0′.29)

Spectrum Me Magn. 9—14



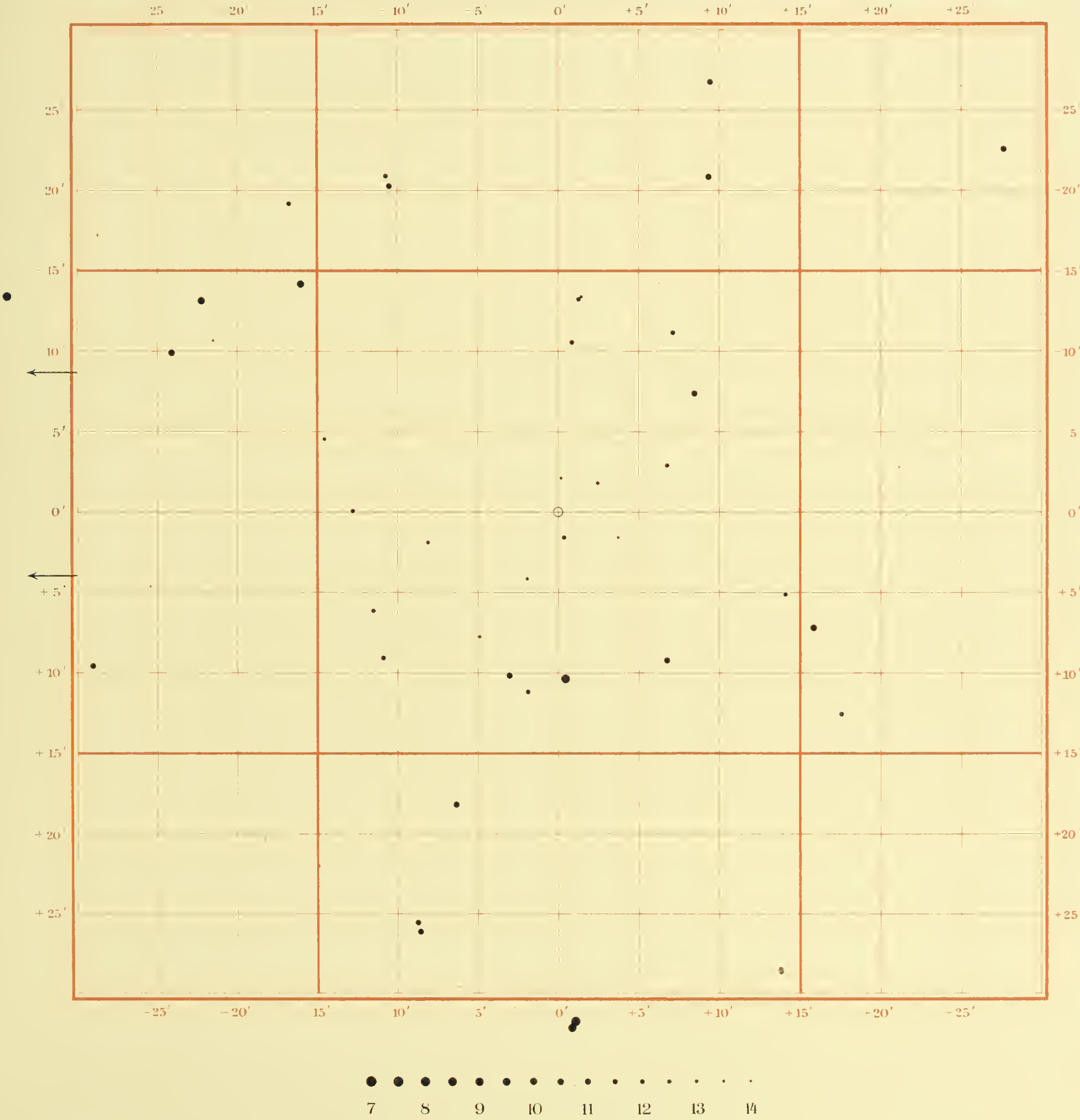
Series VII

150605

Y Librae

(1925.0) $15^h\ 7^m\ 43^s$ $(+3^s\!.17)$ $-5^\circ\ 43'\!.7$ $(-0'\!.23)$

Spectrum M5e Magn. 8—<14



Series VII

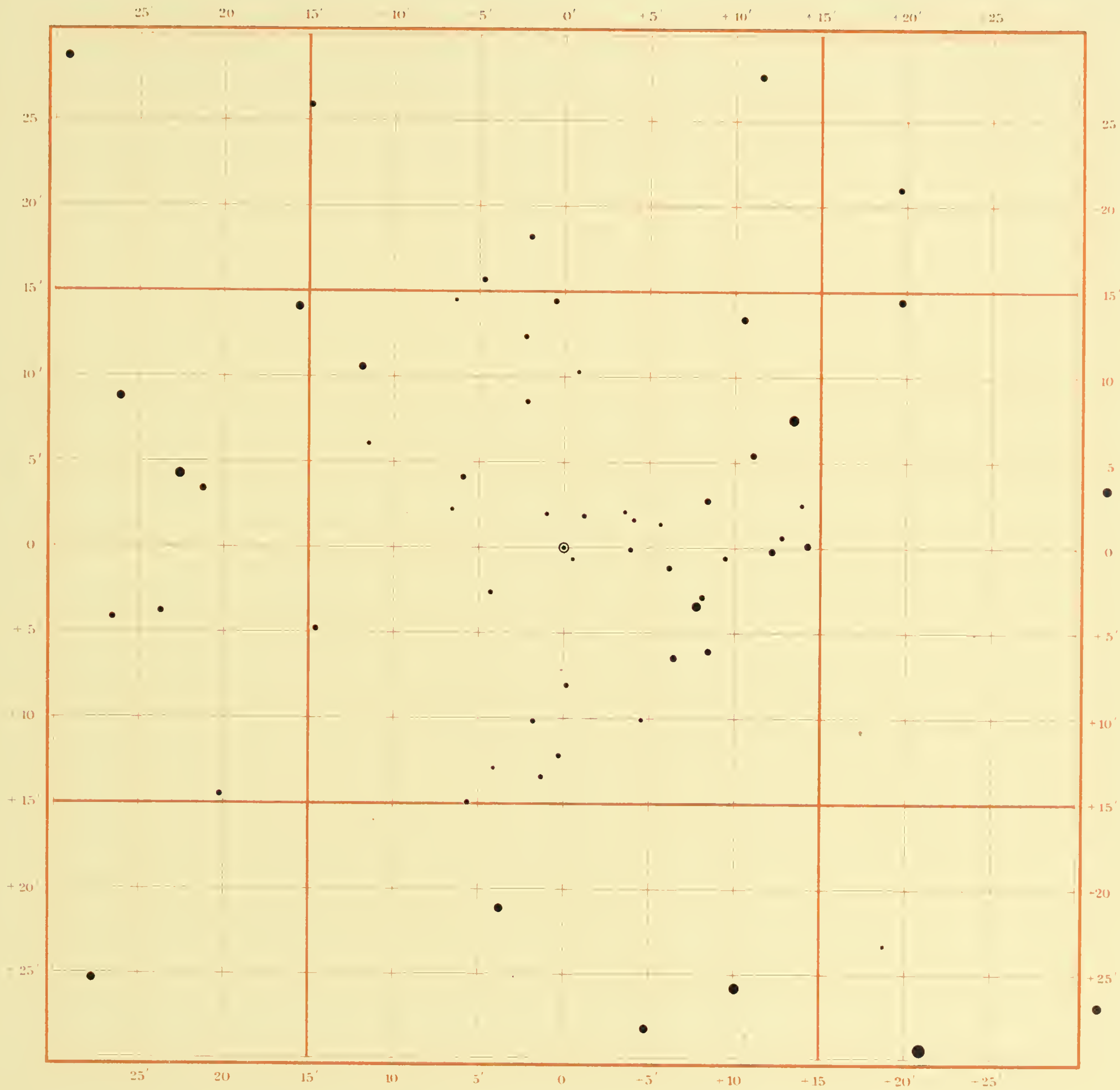
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

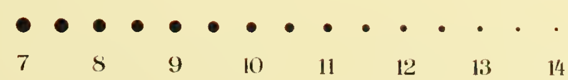
155823

RZ Scorpii

(1925.0) $16^h\ 0^m\ 7^s$ $(+3\overset{s}{.}59)$ $-23^\circ\ 53\overset{\prime}{.}7$ $(-0\overset{\prime}{.}17)$

Spectrum Me Magn. 8—13





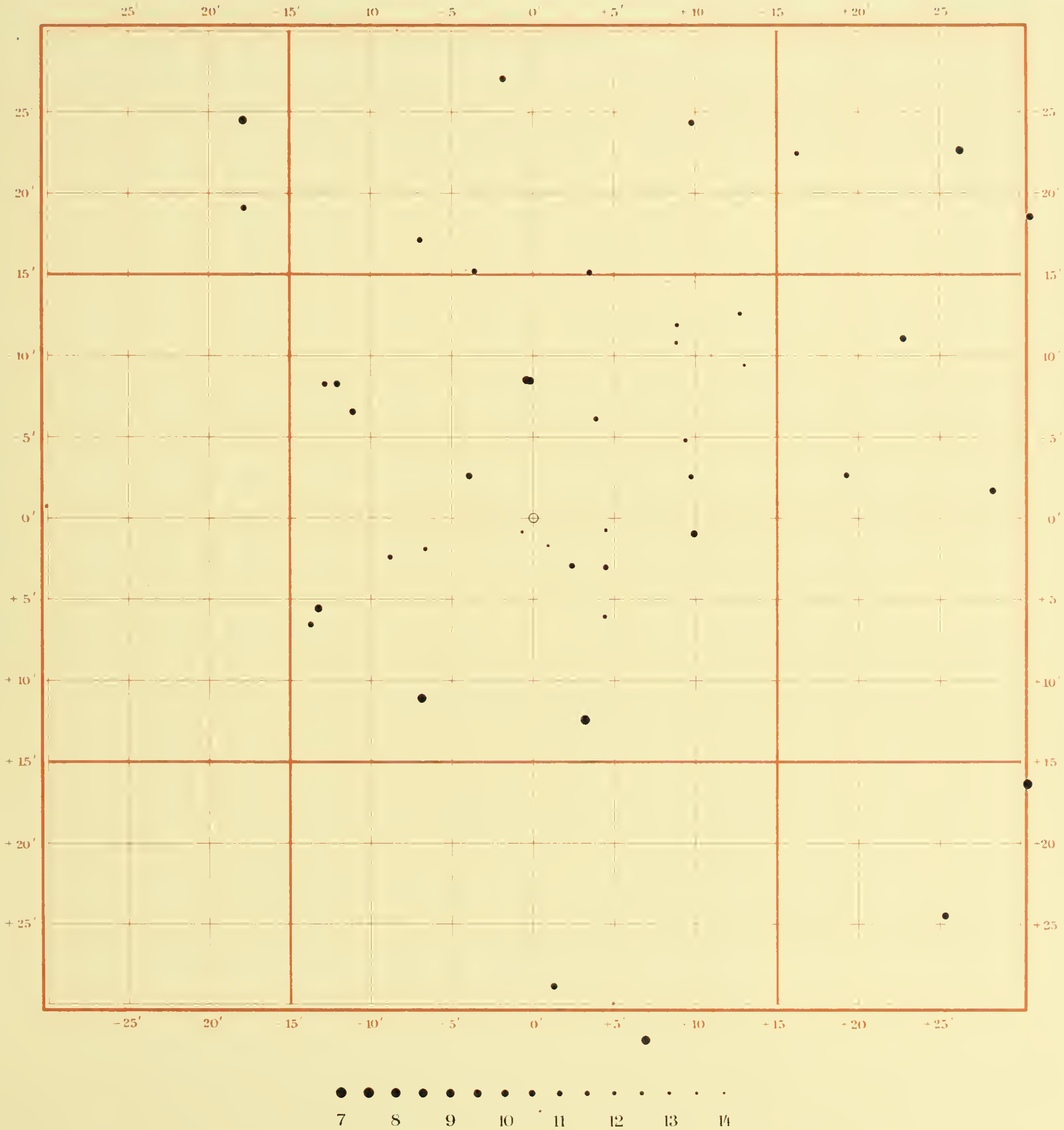
Series VII

164319

RR Ophiuchi

(1925.0) $16^h\ 44^m\ 38^s$ $(+3\overset{s}{.}52)$ $-19^\circ\ 20'\!.0$ $(-0'\!.11)$

Spectrum Me Magn. $8\frac{1}{2}$ — <14



Series VII

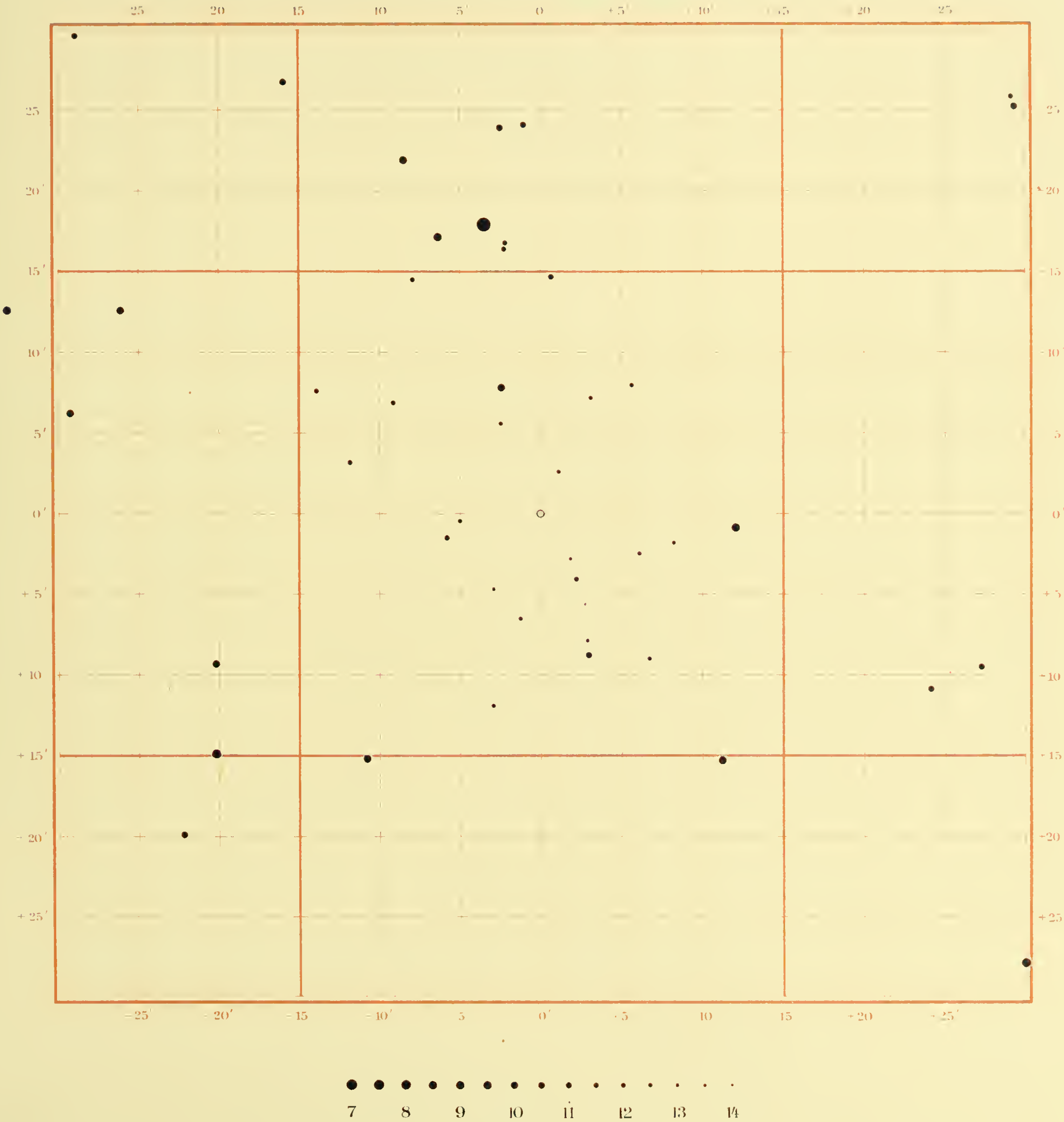
SPECOLA VATICANA, ROMA

165631

RV Herculis

(1925.0) $16^h\ 57^m\ 41^s$ $(+2\overset{s}{.}29)$ $+31^\circ\ 20\overset{\prime}{.}0$ $(-0\overset{\prime}{.}09)$

Spectrum — Magn. $10-15\frac{1}{2}$



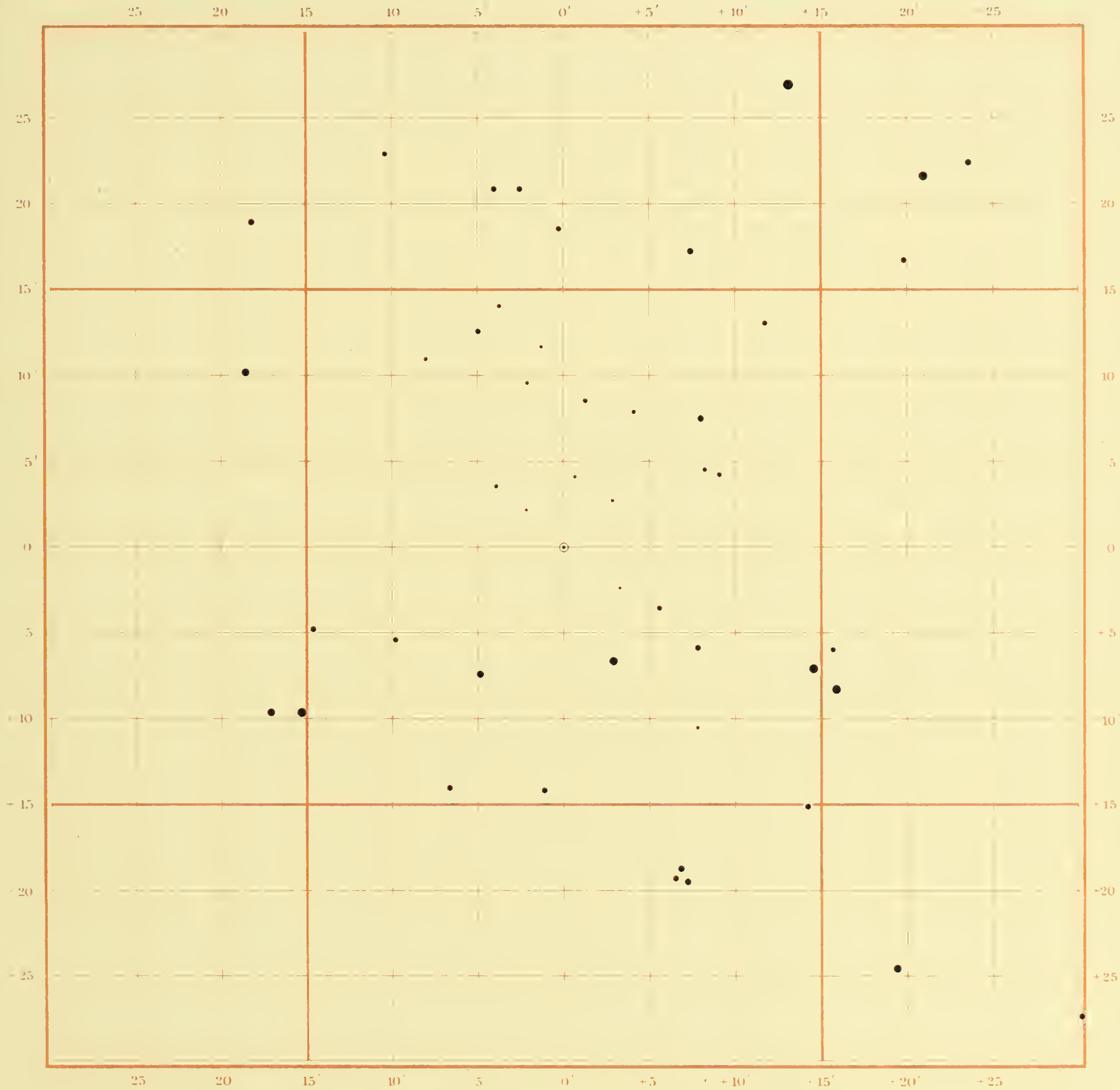
Series VII

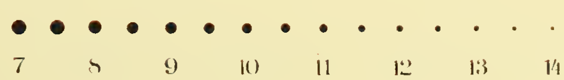
170627

RT Herculis

(1925.0) $17^h\ 7^m\ 48^s$ $(+2^s.40)$ $+27^\circ\ 9'.5$ $(-0'.08)$

Spectrum Me   Magn. 9—14





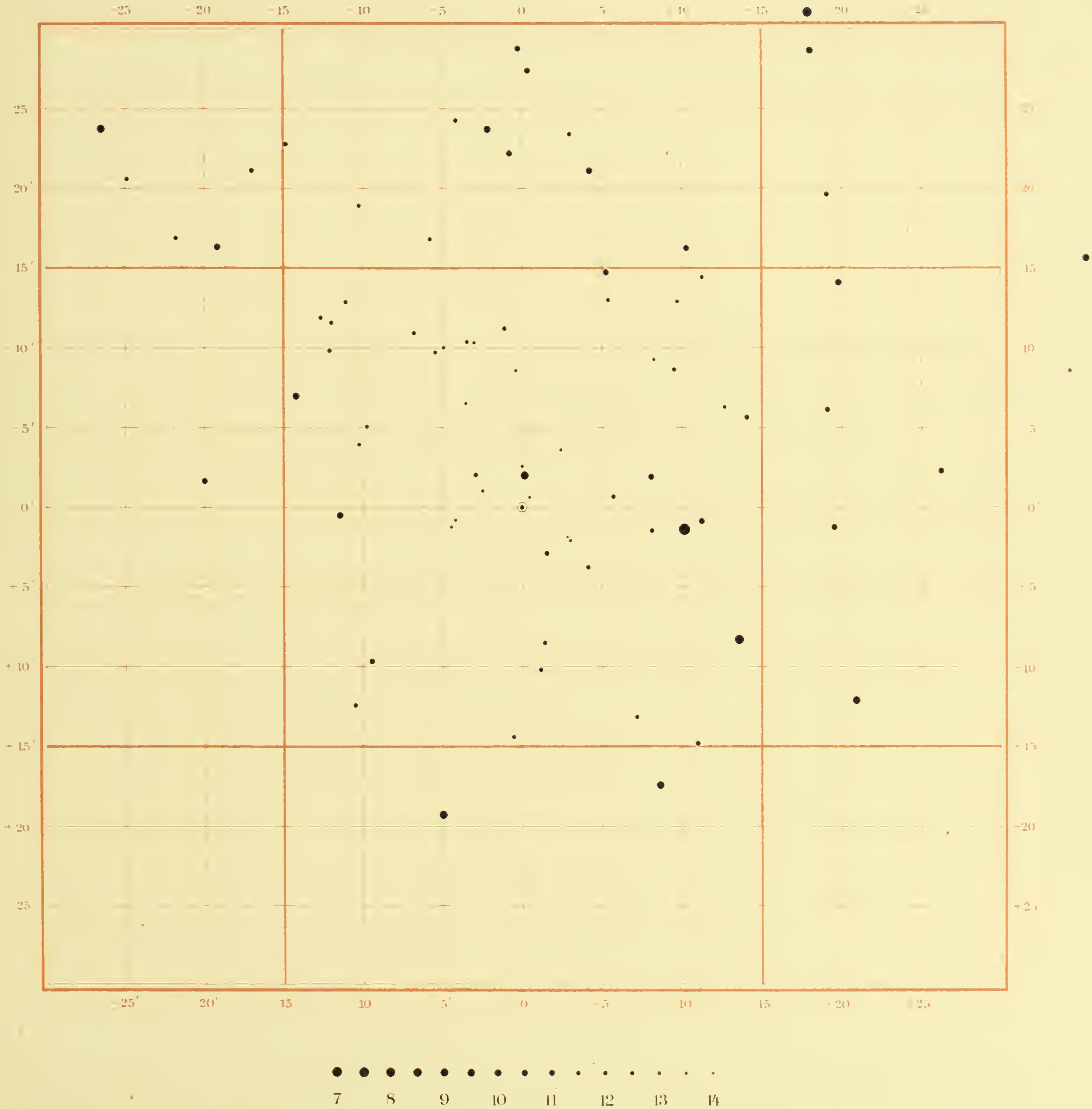
Series VII

175519

RY Herculis

(1925.0) $17^h\ 56^m\ 30^s$ $(+2\overset{s}{.}60)$ $+19°\ 29\overset{\prime}{.}1$ $(-0\overset{\prime}{.}01)$

Spectrum M4e Magn. 8—13½



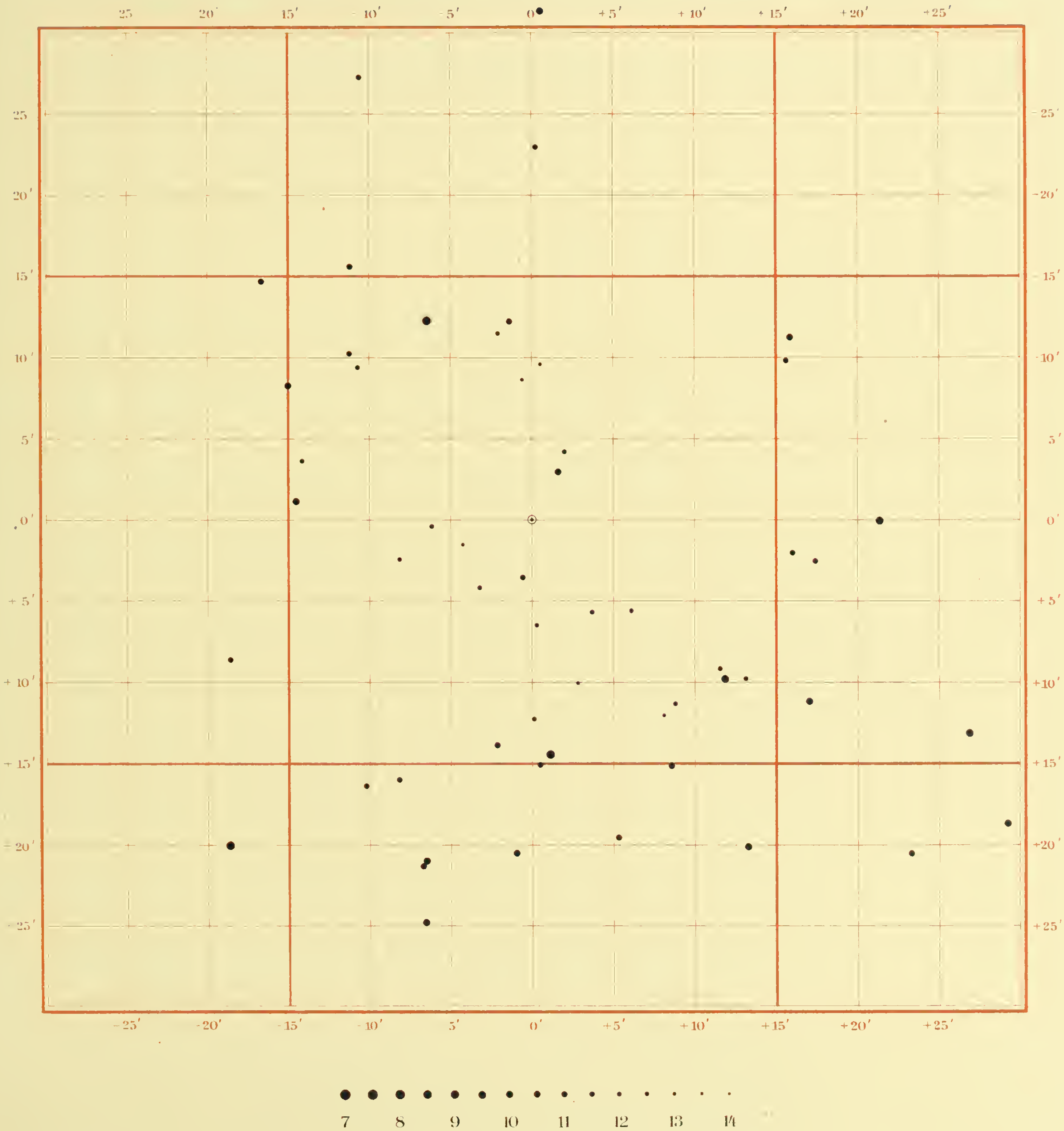
Series VII

175654

V Draconis

(1925.0) $17^h\ 56^m\ 46^s\ (+1^s.17)\quad +54°\ 52'.6\ (0'.00)$

Spectrum Me Magn. $9\frac{1}{2}$—14



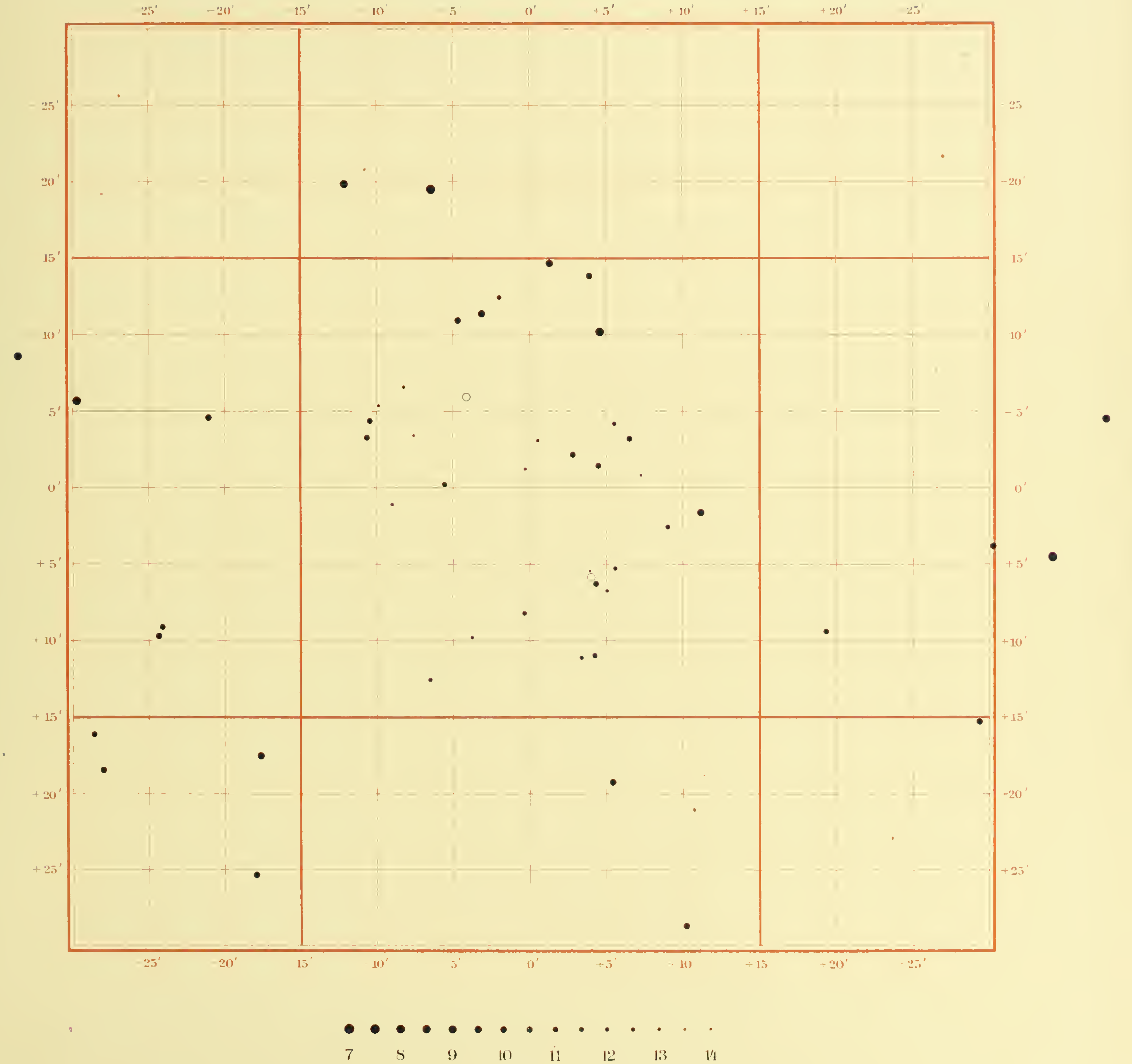
Series VII

180565 & 180666

W & X Draconis

(1925.0) 18^h 6^m 9^s (+0^s.07) +66° 2′.7 (+0′.01)

Spectrum Me, — Magn. 8½—14½, 9—14



Series VII

SPECOLA VATICANA, ROMA

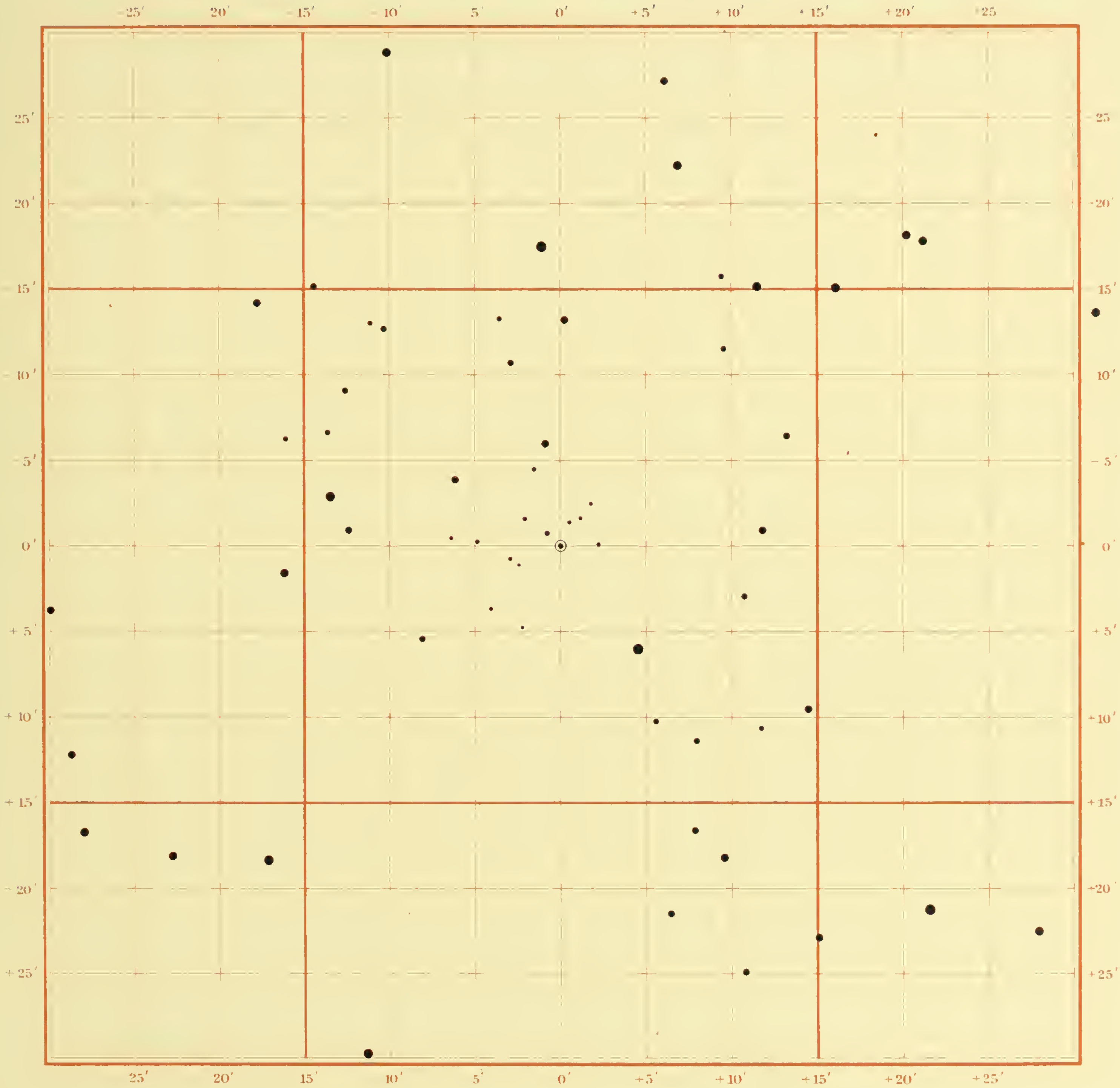
GRAPH INSTIT. JULIUS KLINKHARDT, LEIPZIG

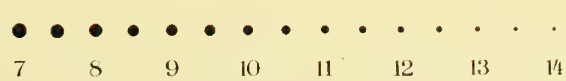
181136

W Lyrae

(1925.0) $18^h\ 12^m\ 20^s$ $(+2^s.08)$ $+36^\circ\ 38'.8$ $(+0'.02)$

Spectrum M5e   Magn. $7\frac{1}{2}$—$12\frac{1}{2}$





Series VII

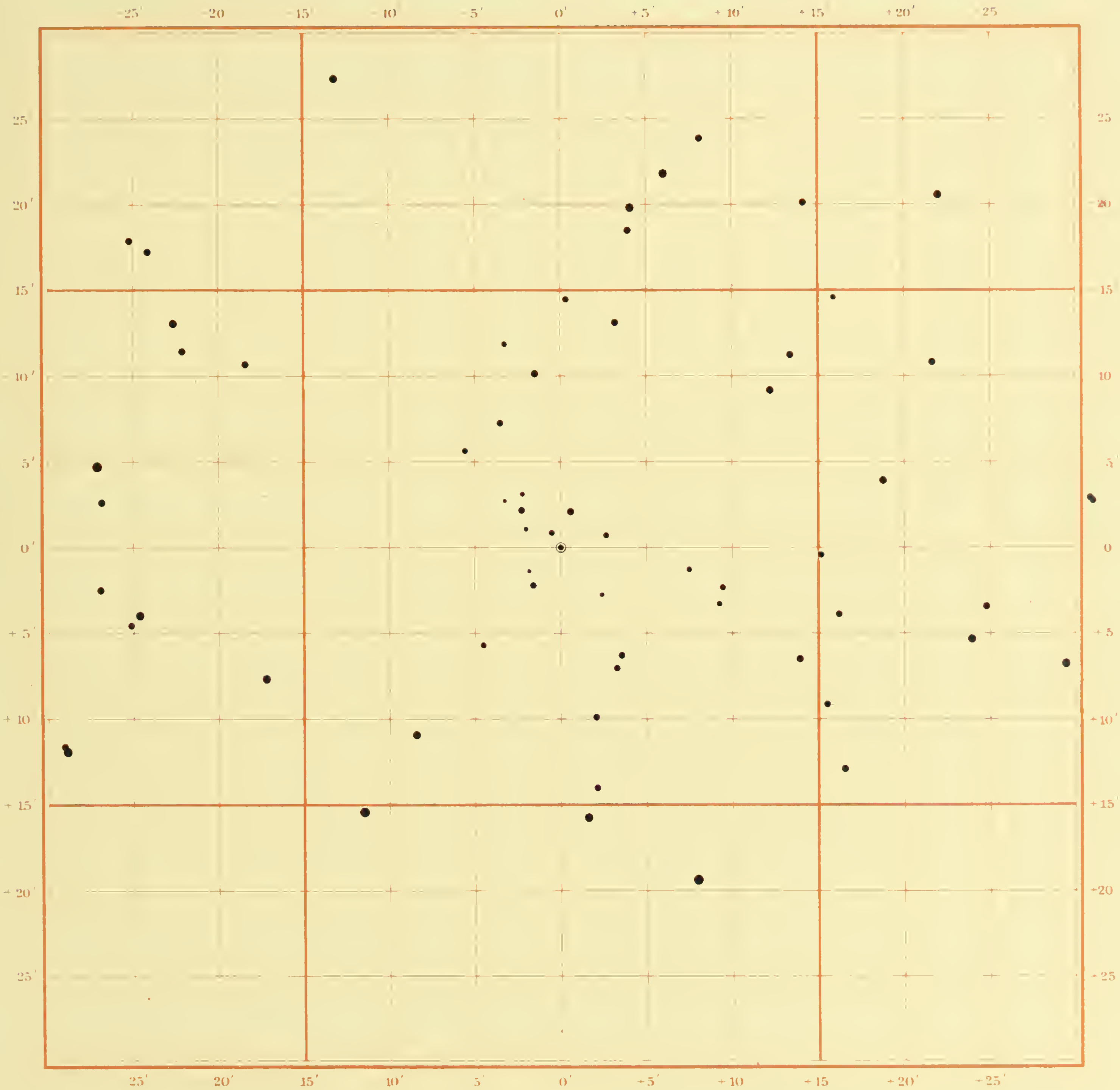
SPECOLA VATICANA, ROMA   GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

182416

SS Sagittarii

(1925.0) 18^{h} 26^{m} 5^{s} (+3^{s}.48) −16° 56′.9 (+0′.04)

Spectrum N Magn. 8—10½





Series VII

SPECOLA VATICANA, ROMA

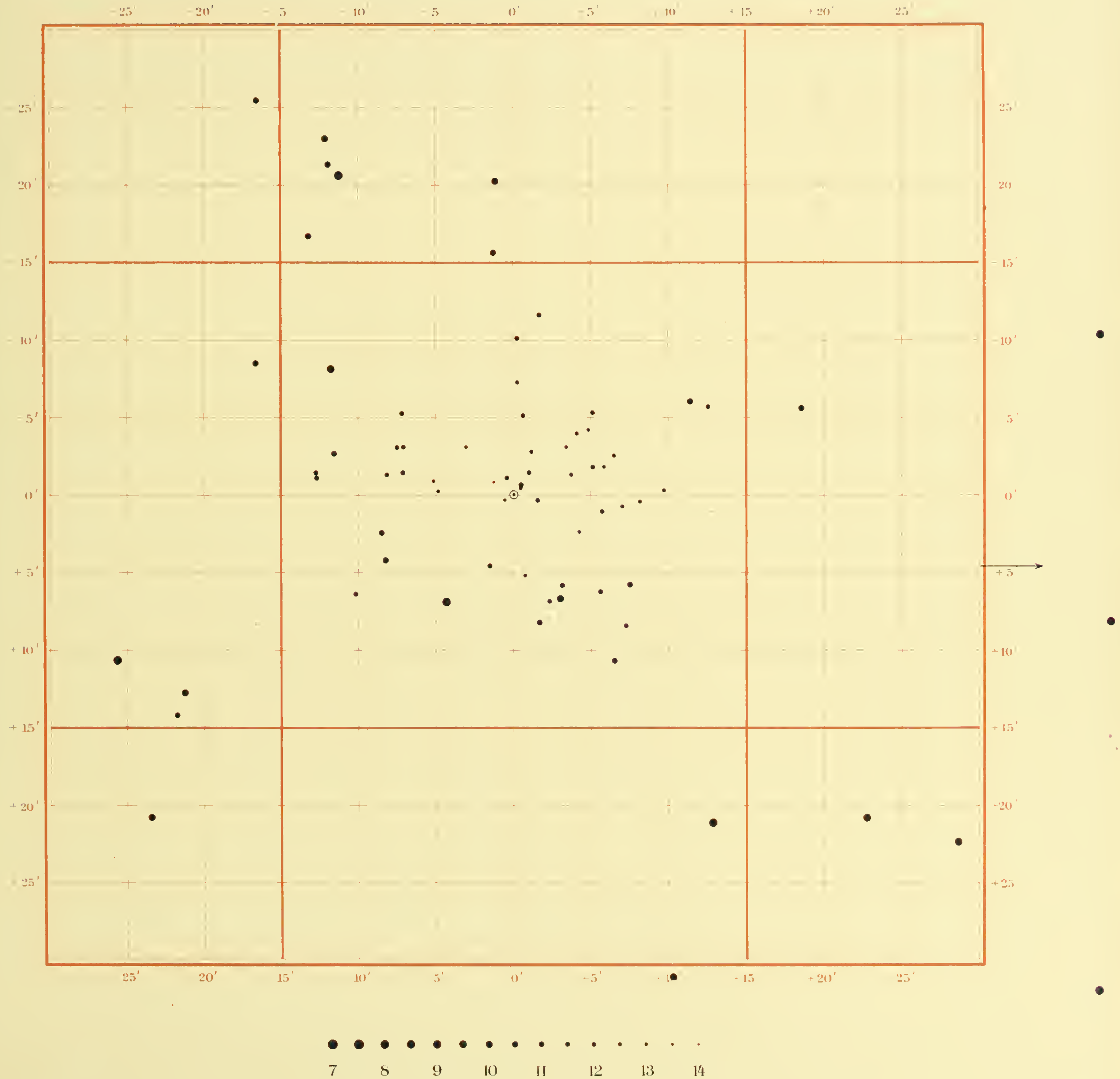
GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

183225

RZ Herculis

(1925.0) 18^h 33^m 45^s (+2^s.43) +25° 59′.1 (+0′.05)

Spectrum Me Magn. 9½—14



Series VII

SPECOLA VATICANA, ROMA

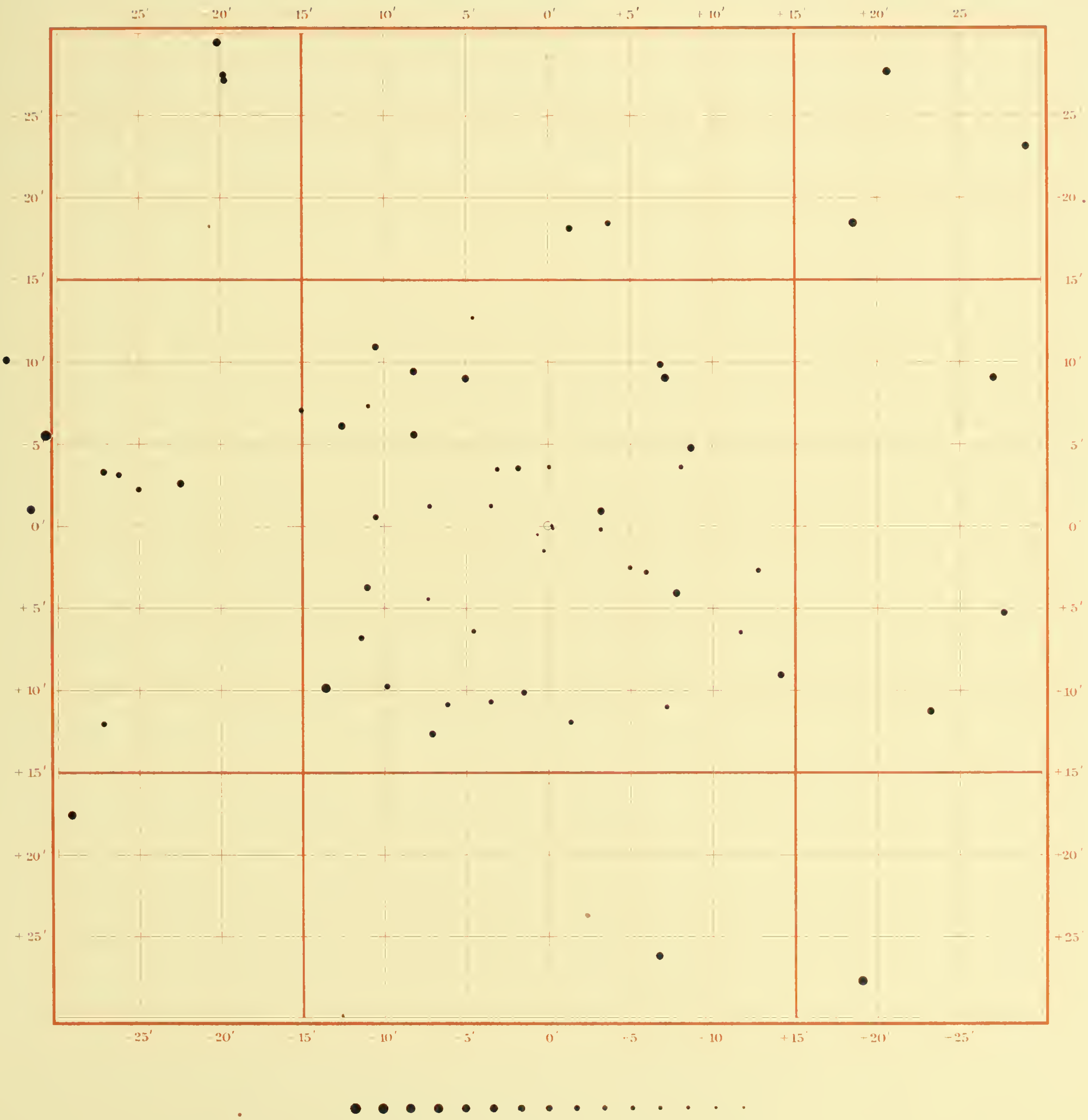
GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

185634

Z Lyrae

(1925.0) $18^h\ 56^m\ 54^s$ $(+2\overset{s}{.}17)$ $+34^\circ\ 51'\!.0$ $(+0'\!.08)$

Spectrum — Magn. $9\frac{1}{2}$—$14\frac{1}{2}$



7 8 9 10 11 12 13 14

Series VII

SPECOLA VATICANA, ROMA

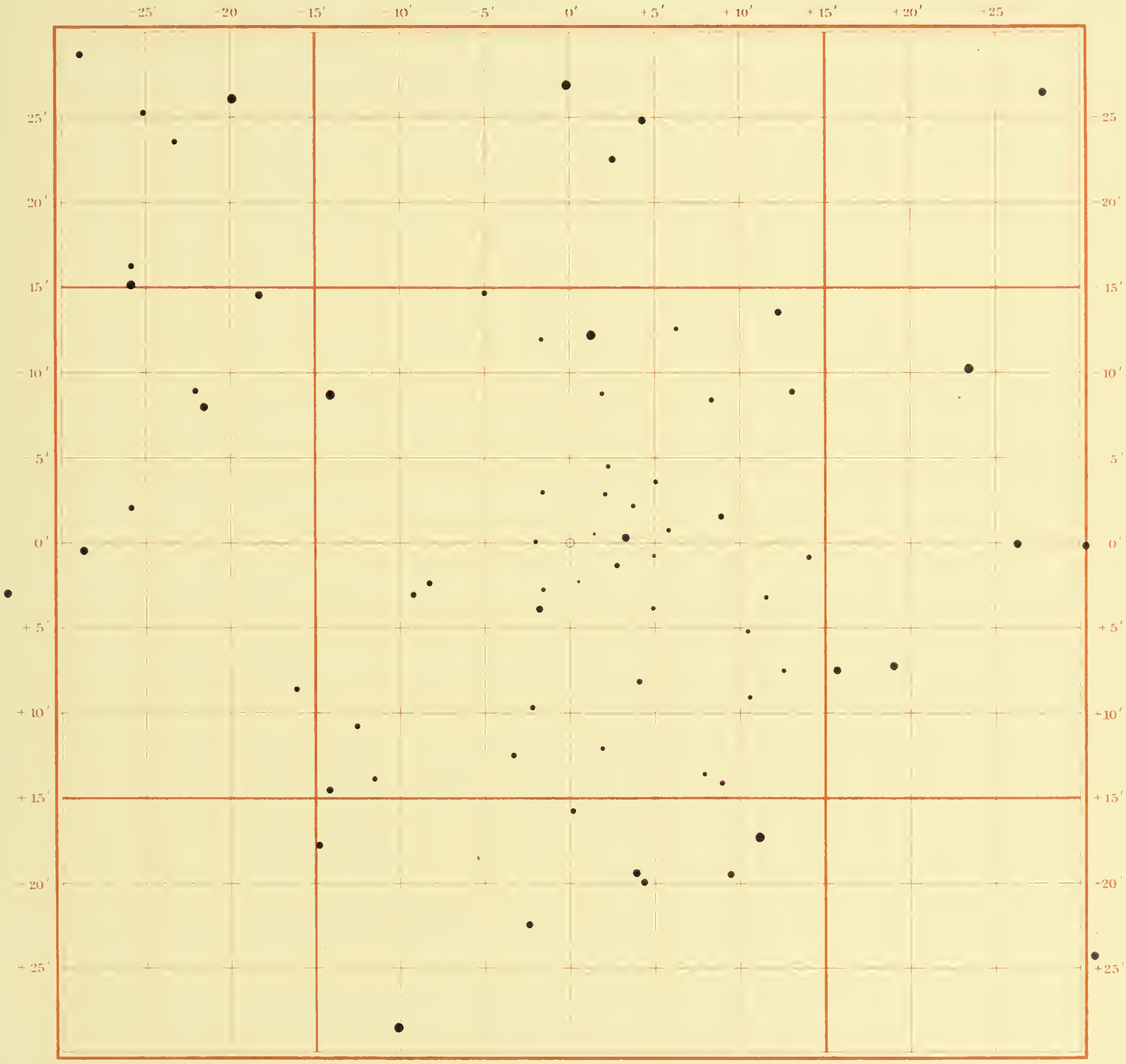
GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

185737

RT Lyrae

(1925.0) $18^h\ 58^m\ 38^s$ ($+2\overset{s}{.}08$) $+37°\ 24\overset{\prime}{.}8$ ($+0\overset{\prime}{.}08$)

Spectrum Me Magn. $9\frac{1}{2}$—<14



7 8 9 10 11 12 13 14

Series VII

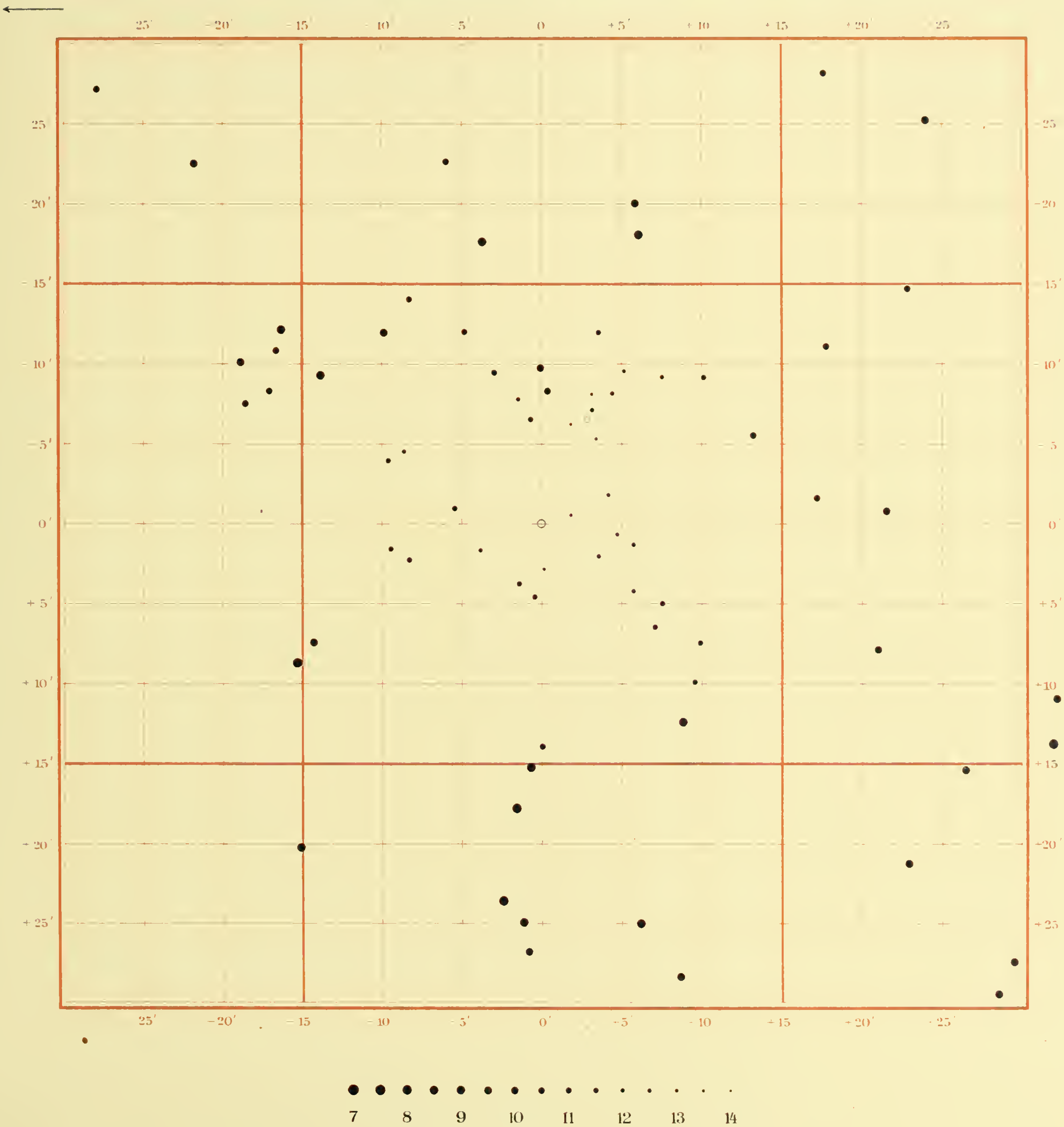
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT LEIPZIG

190529a

V (& VZ) Lyrae

(1925.0) $19^h\ 6^m\ 8^s$ $(+2^s.35)$ $+29^\circ\ 32'.2$ $(+0'.10)$

Spectrum Me, — Magn. 9—<15, ($10\frac{1}{2}$—16)



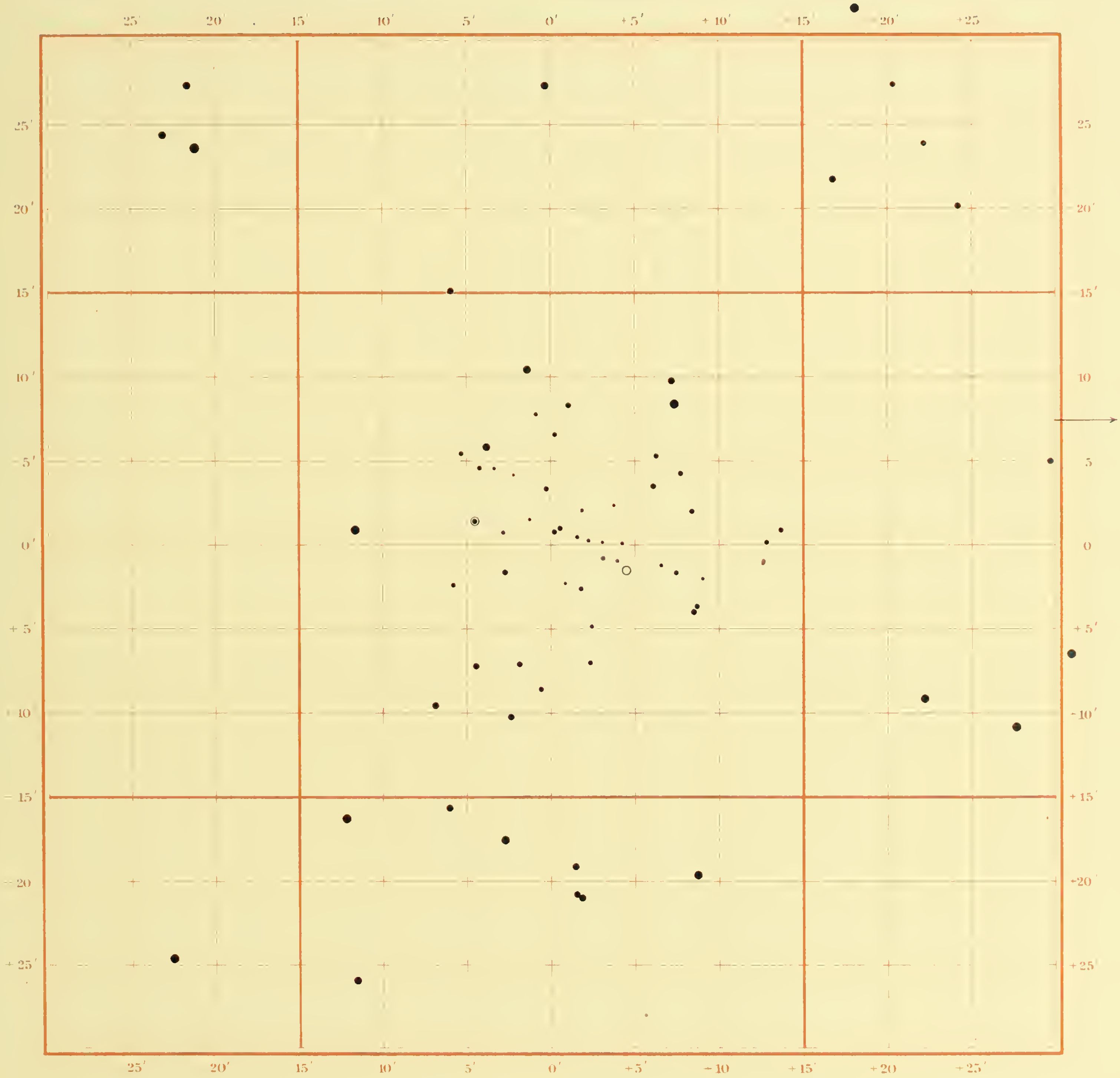
Series VII

190819a & 190818

RW & RX (& BH) Sagittarii

(1925.0) 19^h 9^m 51^s (+3^s.51) —18° 58′.0 (+0′.10)

Spectrum Me, Me Magn. 9—12, 9—<14, (12½—13½)



7 8 9 10 11 12 13 14

Series VII

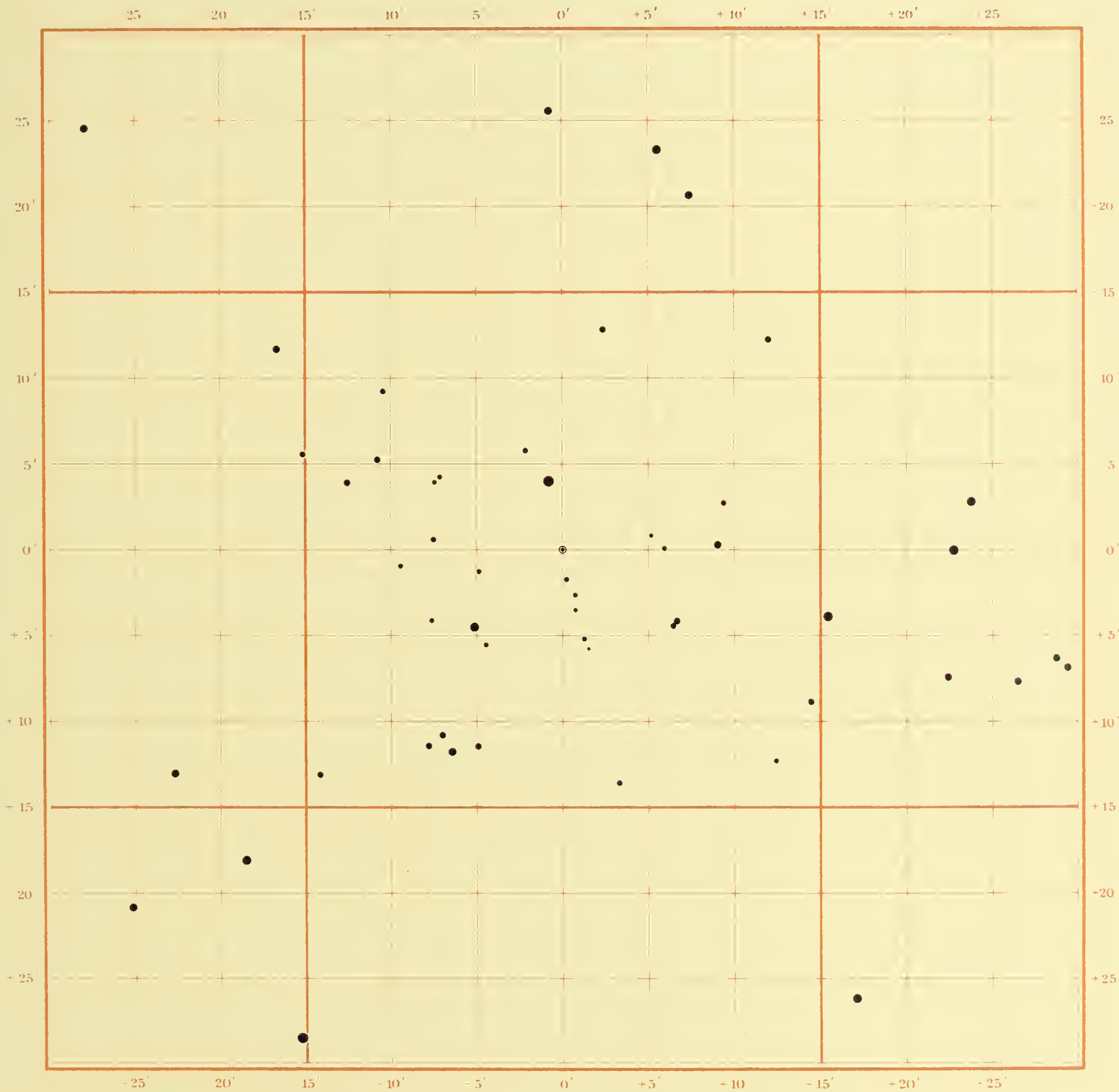
SPECOL. VATICANA, ROMA GRAPH. INSTIT. JULIUS KLINKHARDT, LEIPZIG

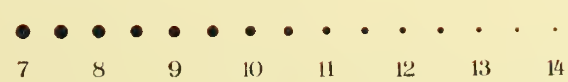
190941

RU Lyrae

(1925.0) $19^h\ 9^m\ 54^s$ $(+1^s.96)$ $+41^\circ\ 10'.6$ $(+0'.10)$

Spectrum — Magn. 10—13½





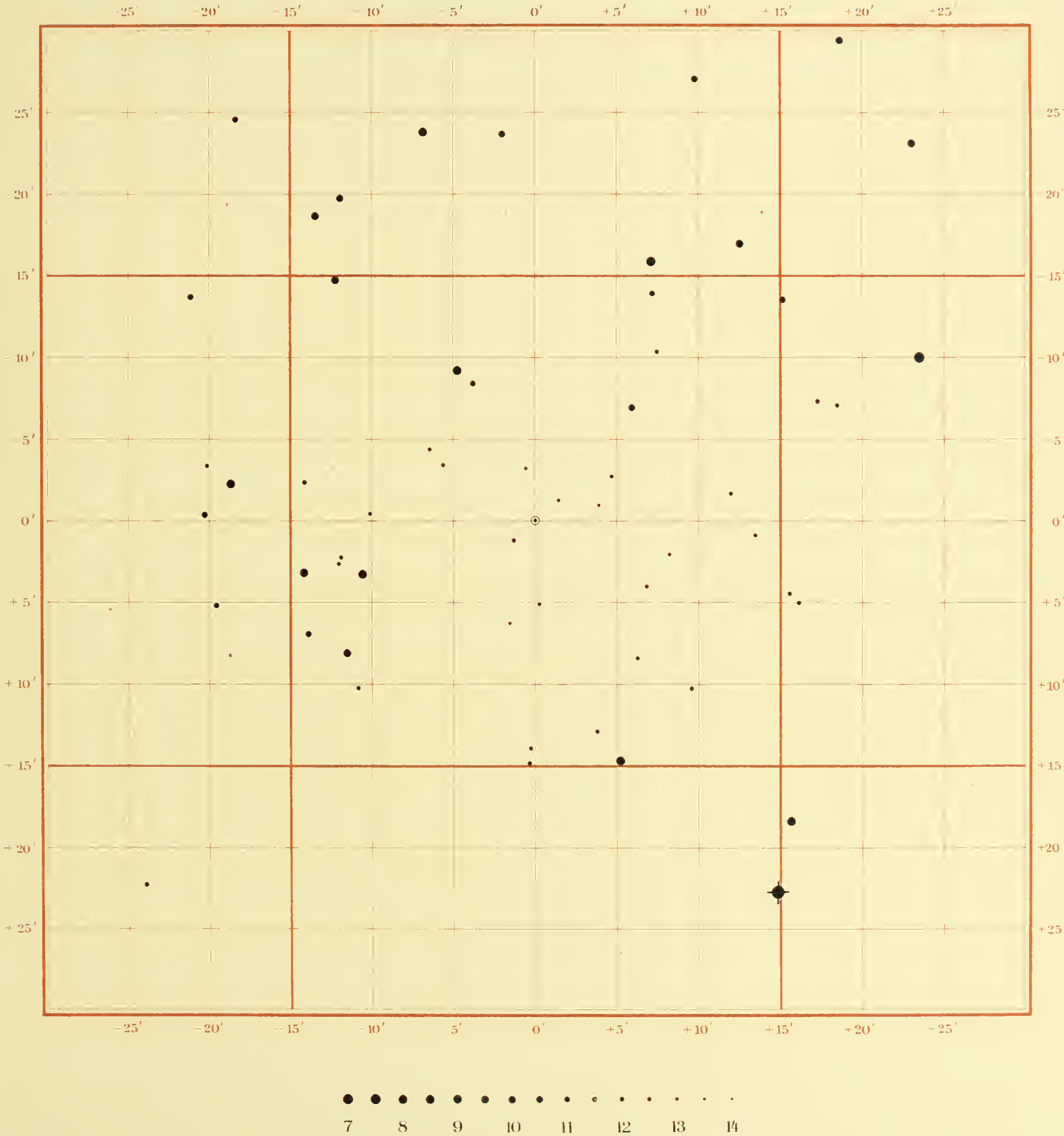
Series VII

190967

U Draconis

(1925.0) $19^h\ 9^m\ 58^s$ $(+0.^s05)$ $+67°\ 9.'1$ $(+0.'10)$

Spectrum Me Magn. 9—14



Series VII

SPECOLA VATICANA, ROMA

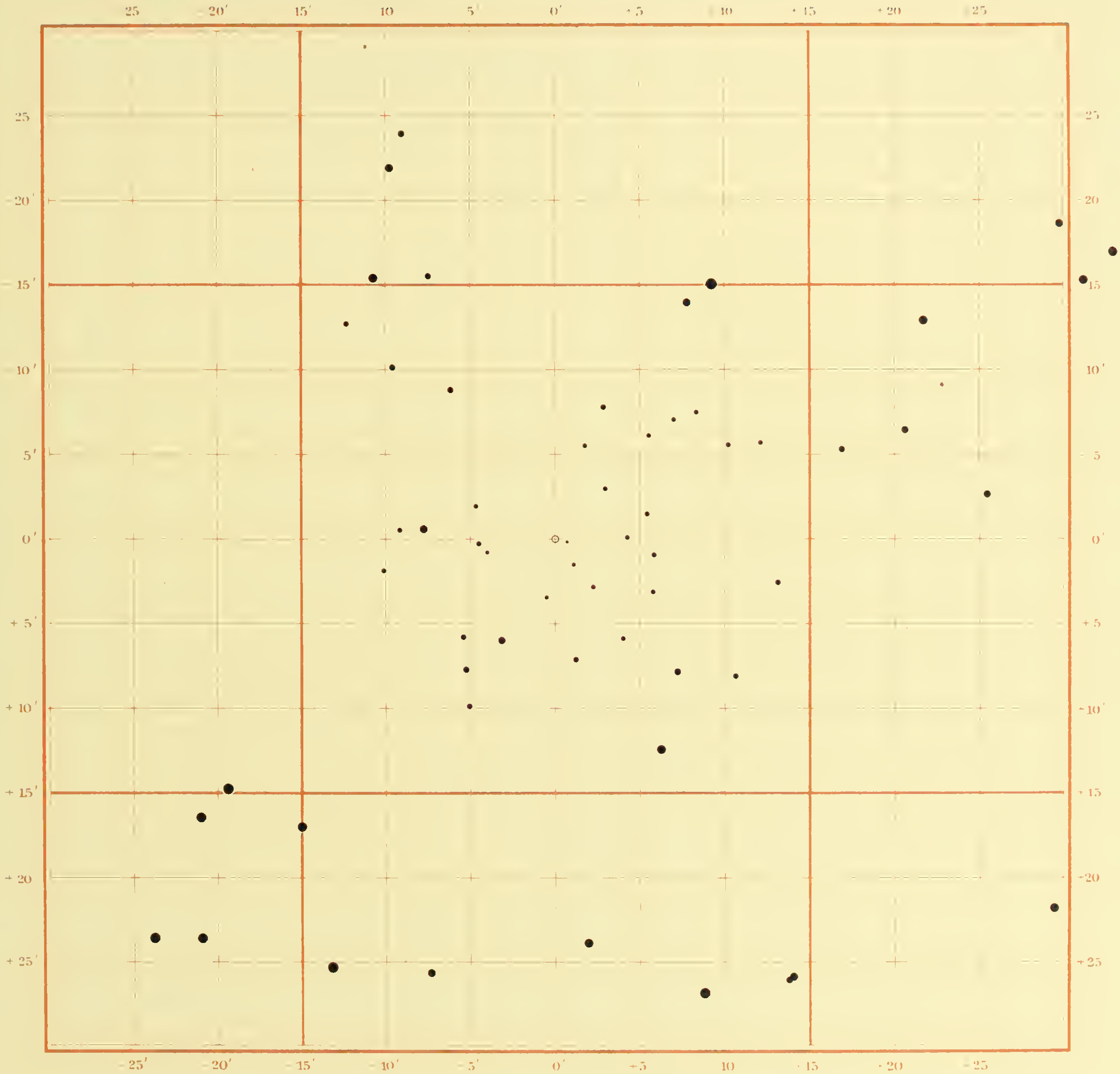
GRAPH. INSTIT. JULIUS KLINKHARDT LEIPZIG

190925

S Lyrae

(1925.0) $19^h\ 10^m\ 8^s$ $(+2\overset{s}{.}45)$ $+25^\circ\ 52\overset{\prime}{.}8$ $(+0\overset{\prime}{.}10)$

Spectrum Me Magn. $9\frac{1}{2}$—<15,



7 8 9 10 11 12 13 14

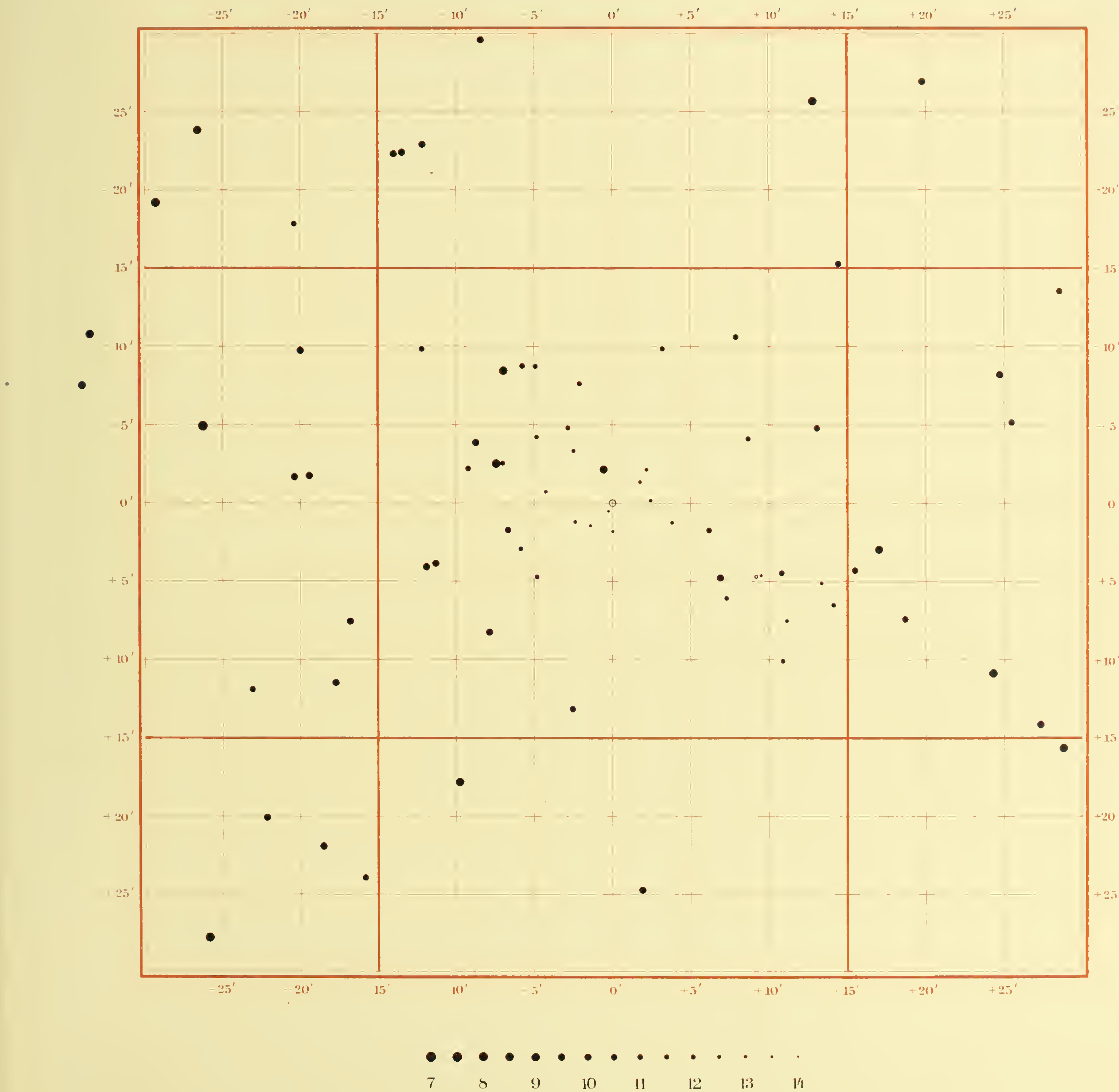
Series VII

190933 a

RS (& WW) Lyrae

(1925.0) $19^{h}\ 10^{m}\ 14^{s}$ $(+2\overset{s}{.}24)$ $+33^{\circ}\ 17'\!.1$ $(+0'\!.10)$

Spectrum Me **Magn. 10—<14, (13—14)**



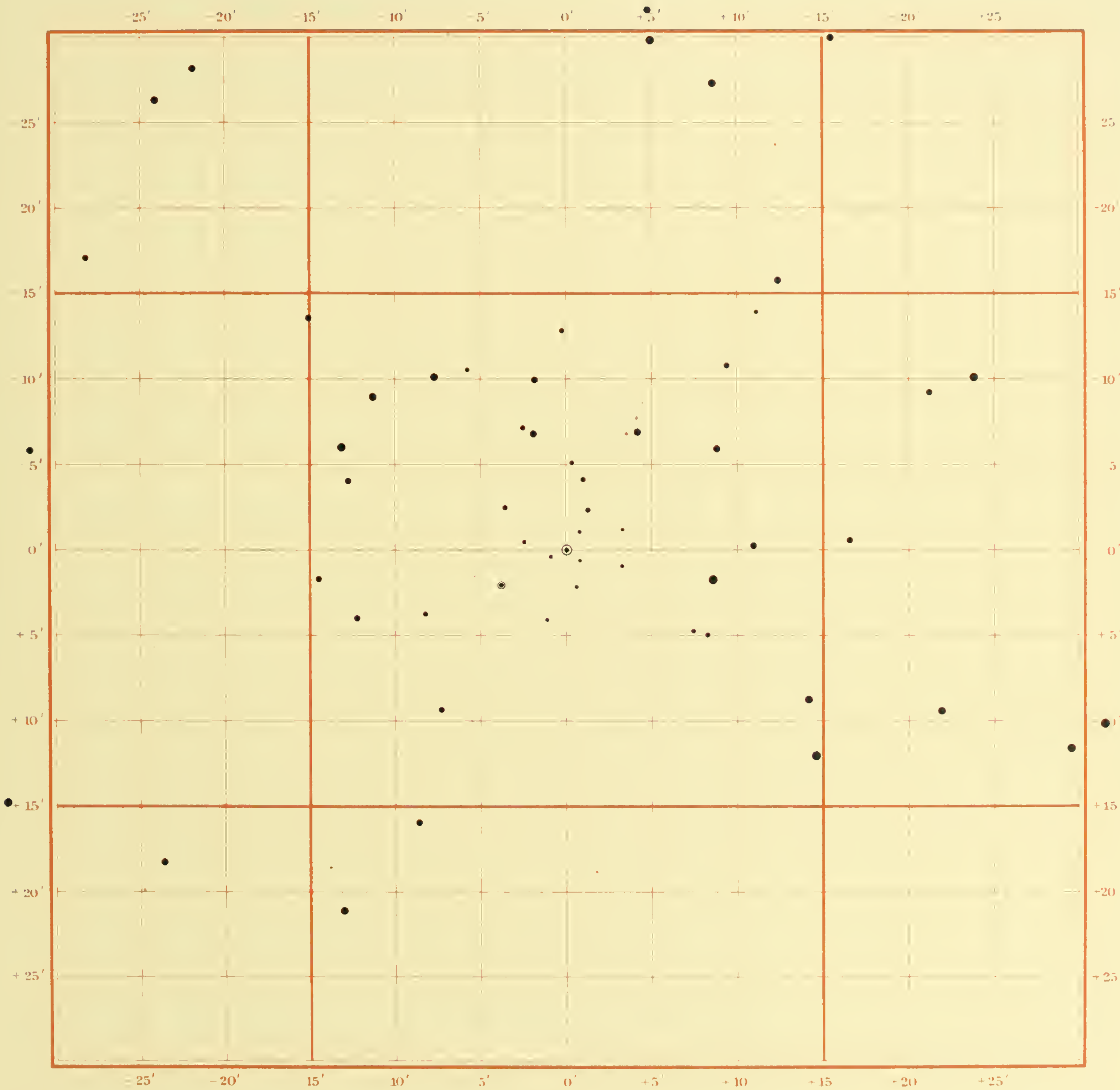
Series VII

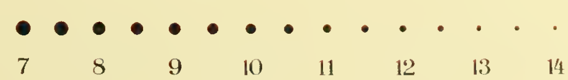
191007

W (& TY) Aquilae

(1925.0) $19^h\ 11^m\ 21^s$ $(+3\overset{s}{.}23)$ $-7^\circ\ 10\overset{\prime}{.}7$ $(+0\overset{\prime}{.}10)$

Spectrum —, — Magn. 8—13½, (10—11½)





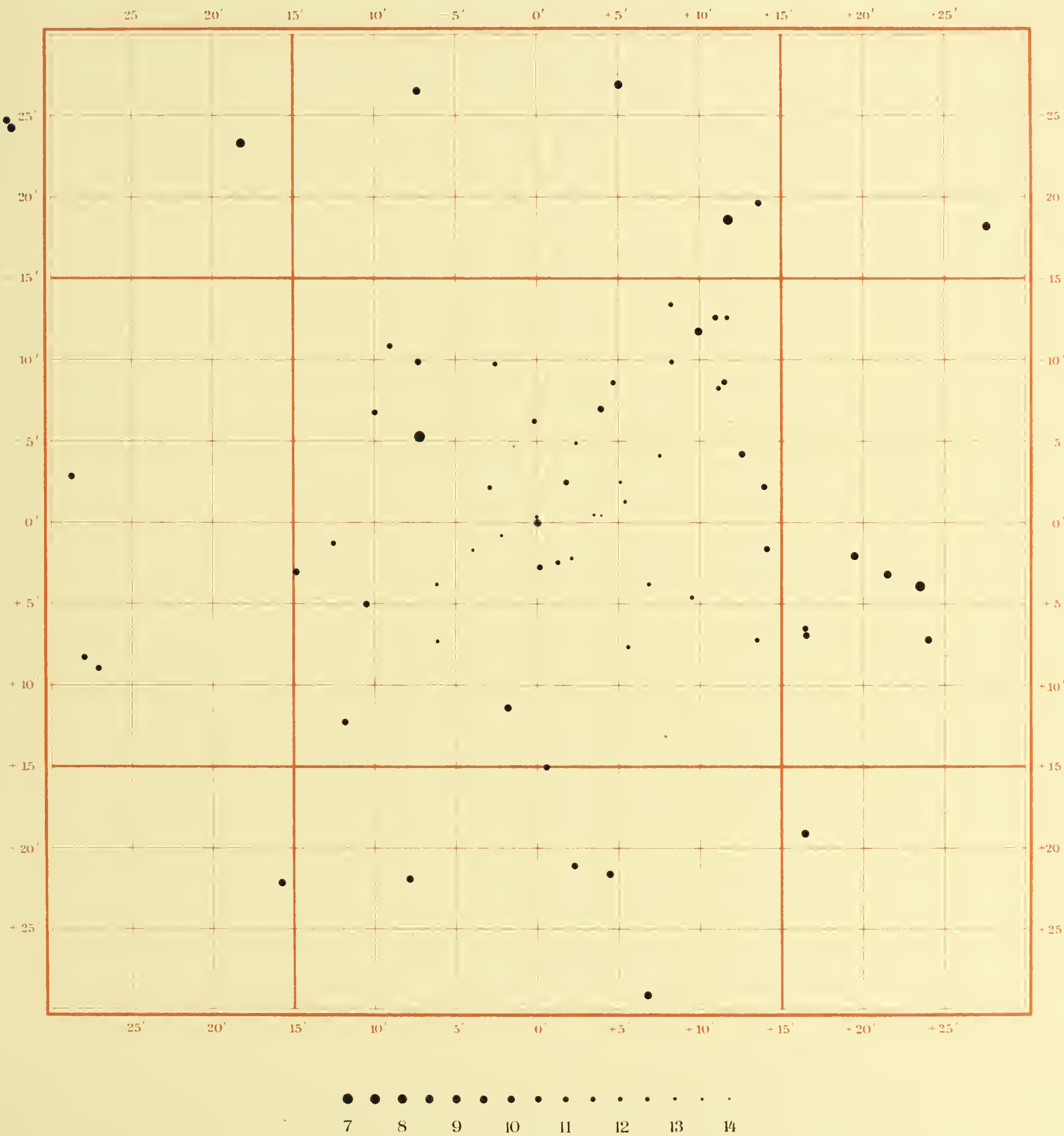
Series VII

191350

TZ Cygni

(1925.0) 19h 14m 7s (+1s56) +50° 1′.6 (+0′.11)

Spectrum M Magn. 9½–11½



Series VII

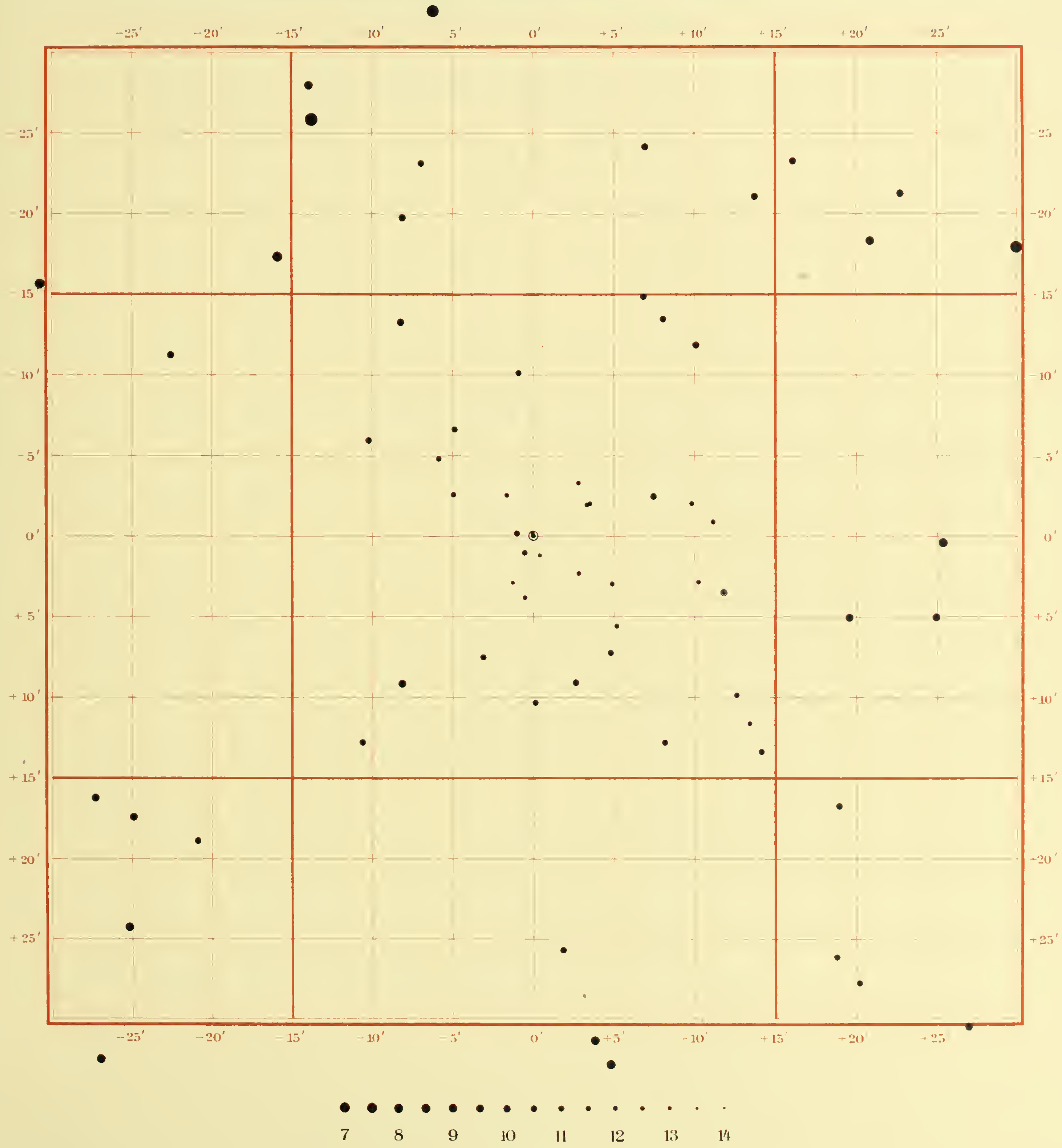
SPECOLA VATICANA, ROMA GRAPH. INSTIT. JULIUS KLINKHARDT, LEIPZIG

191637

U (& UZ) Lyrae

(1925.0) $19^h\ 17^m\ 32^s$ $(+2\overset{s}{.}10)$ $+37°\ 44'.2$ $(+0'.11)$

Spectrum N? Magn. $8\frac{1}{2}$—<12, (10—$11\frac{1}{2}$)



Series VII

SPECOLA VATICANA, ROMA

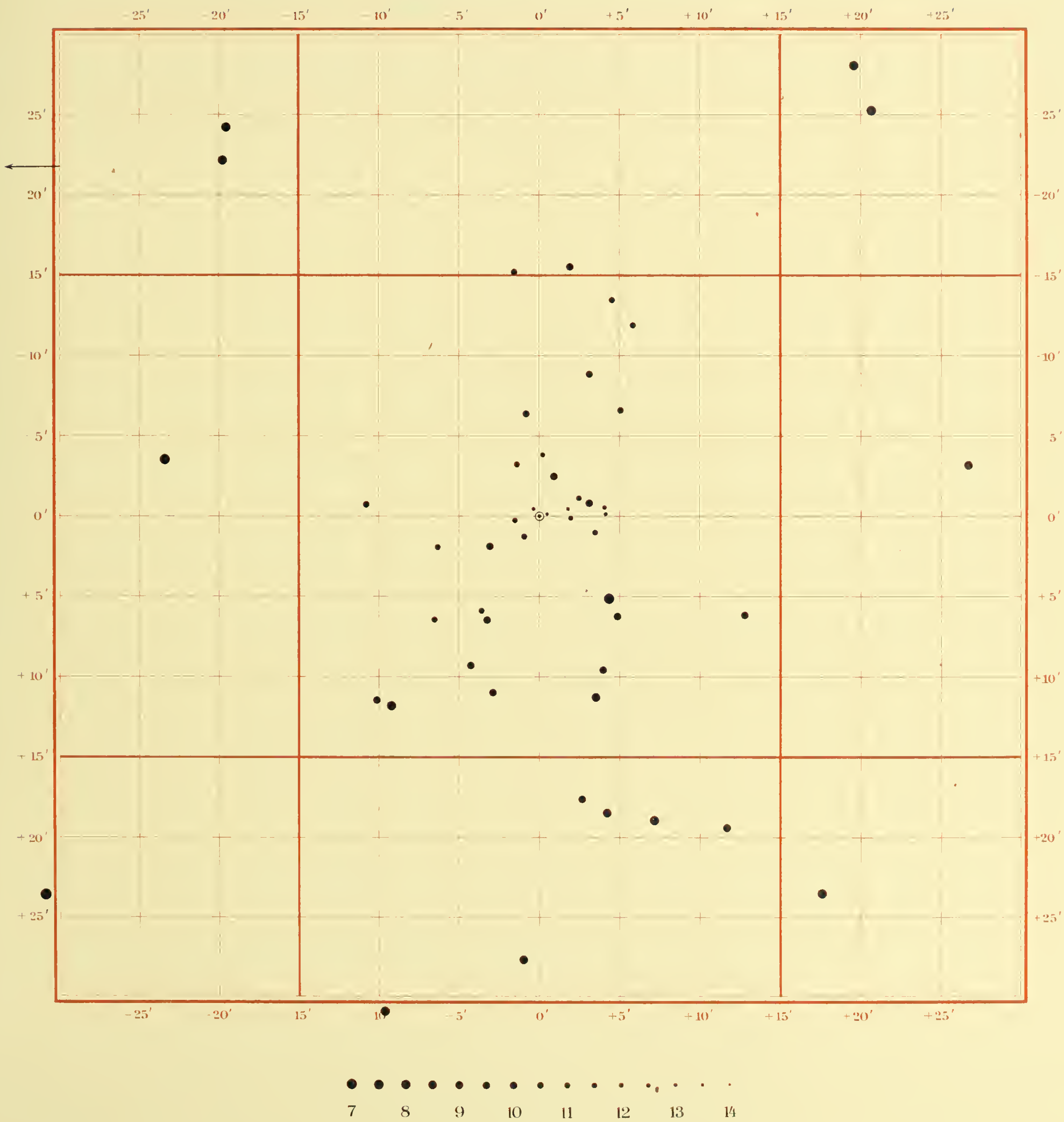
GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

192928

TY Cygni

(1925.0) 19^h 30^m 51^s (+2^s.41) +28° 9′.9 (+0′.13)

Spectrum M   Magn. 8½—13½



Series VII

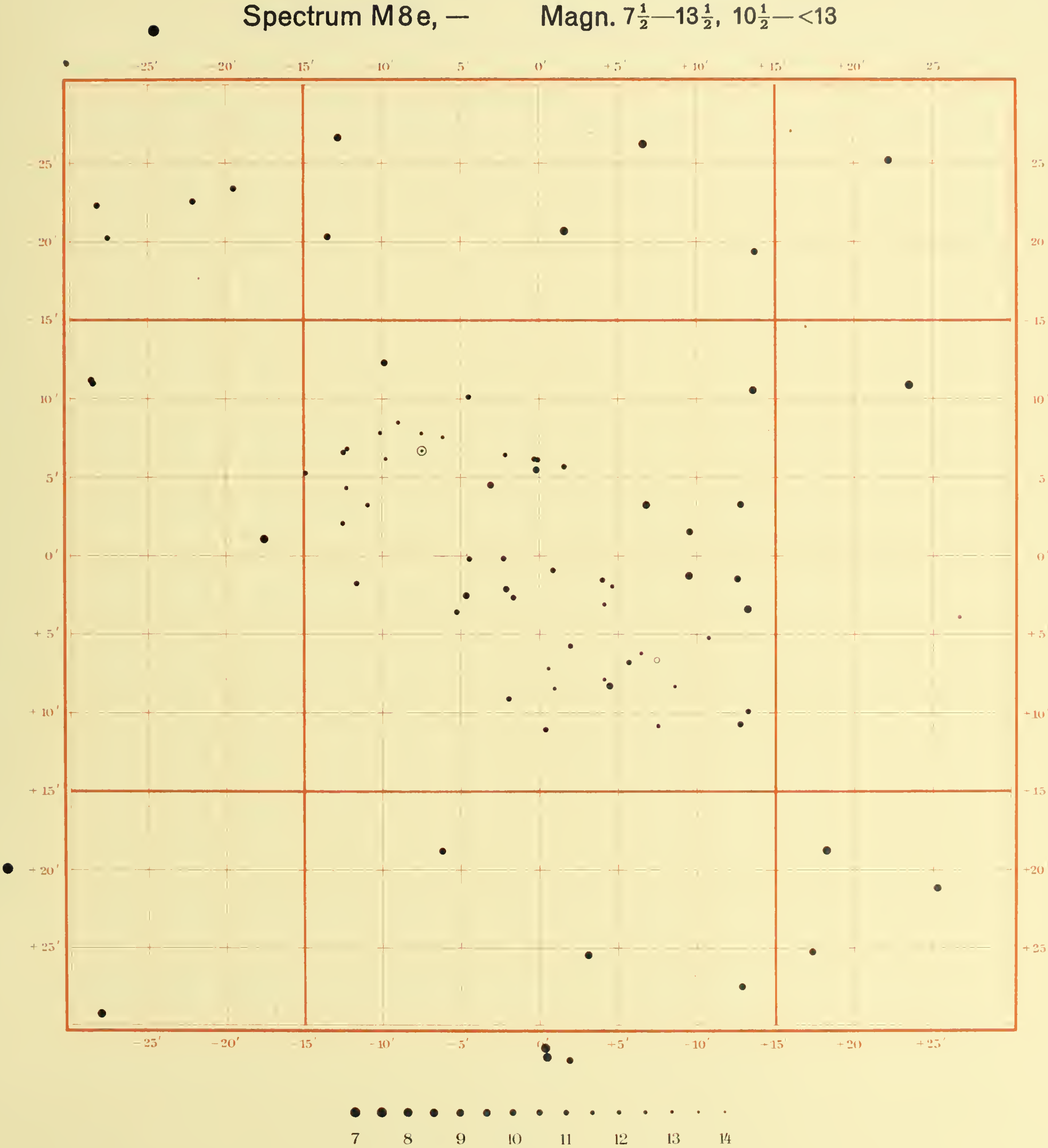
SPECOLA VATICANA, ROMA   GRAPH. INSTITUT JULIUS KLINKHARDT, LEIPZIG

193311 & 193411

RT & SV Aquilae

(1925.0) $19^h\ 35^m\ 0^s$ $(+2.^s82)$ $+11^\circ\ 39.'8$ $(+0.'13)$

Spectrum M8e, — Magn. $7\frac{1}{2}$—$13\frac{1}{2}$, $10\frac{1}{2}$—<13



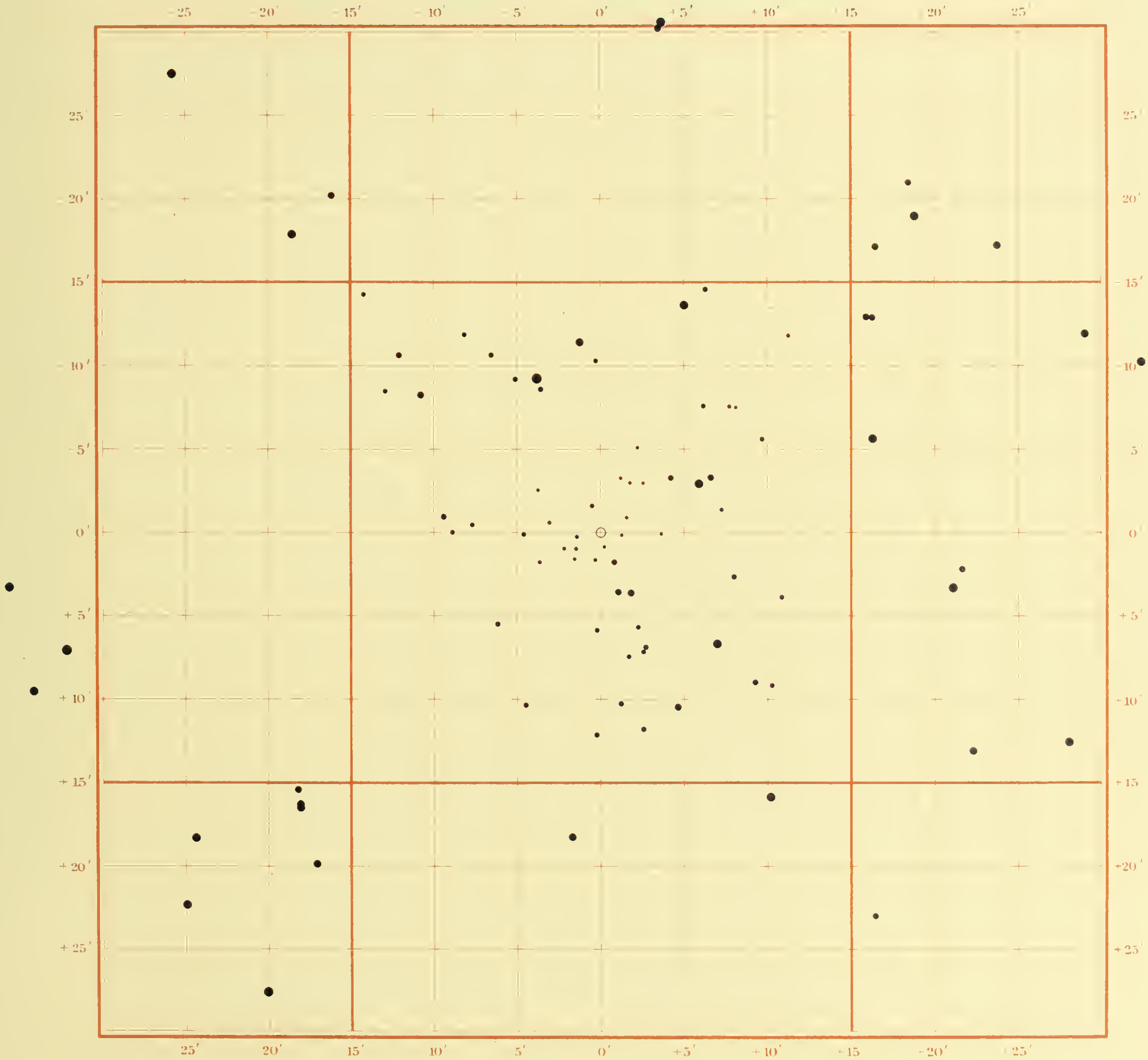
Series VII

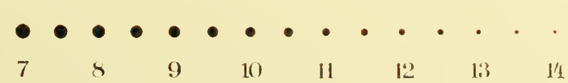
193509

RV Aquilae

(1925.0) $19^h\ 37^m\ 8^s$ $(+2^s.86)$ $+9^\circ\ 45'.4$ $(+0'.14)$

Spectrum Me Magn. 8—<13½





Series VII

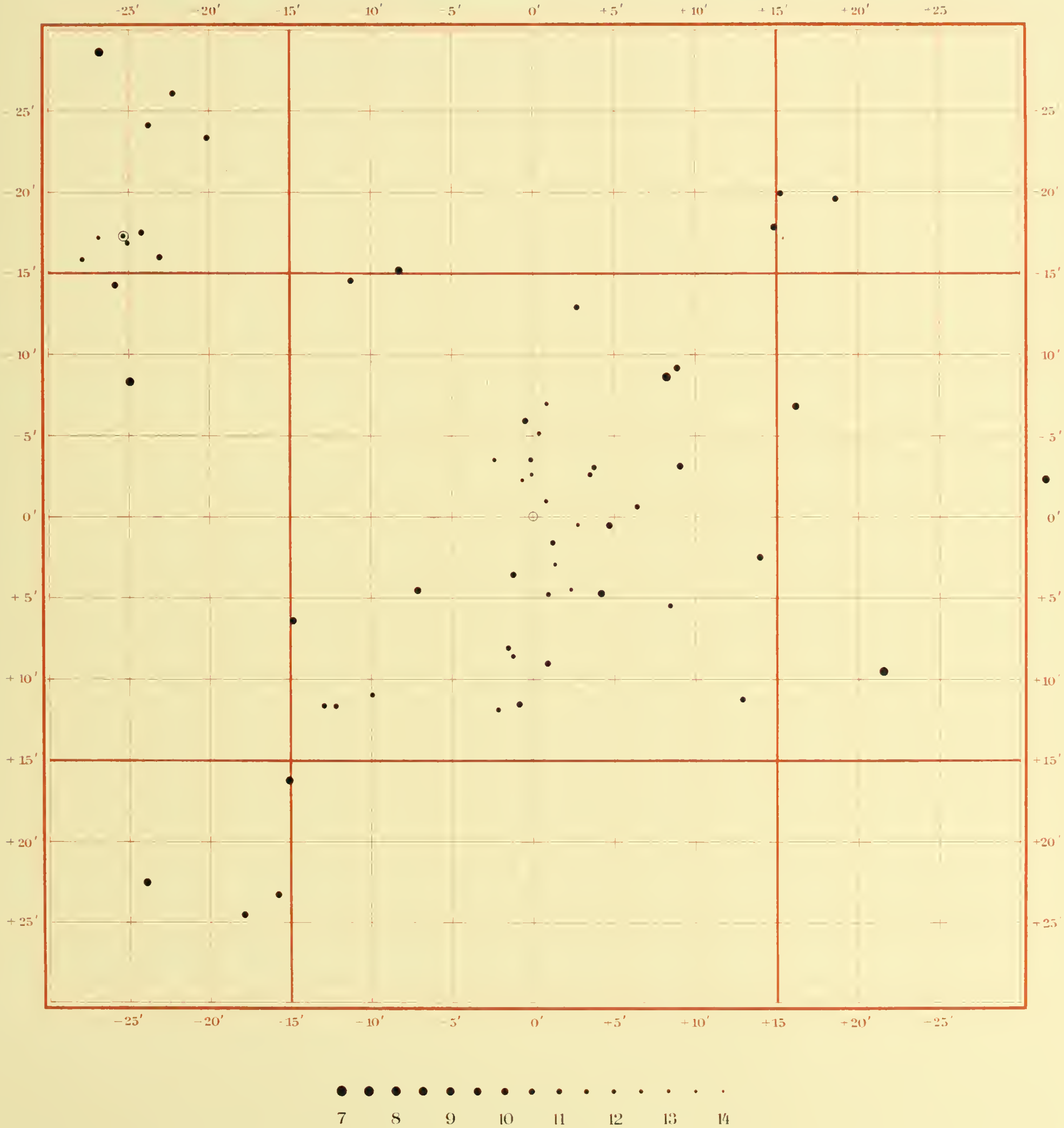
SPECOLA VATICANA, ROMA

194348

TU (& RT) Cygni

(1925.0) $19^h\ 44^m\ 3^s$ $(+1\overset{s}{.}70)$ $+48°\ 53'\!.3$ $(+0'\!.15)$

Spectrum Me Magn. $8\frac{1}{2}$—$15\frac{1}{2}$, ($7\frac{1}{2}$—12)



Series VII

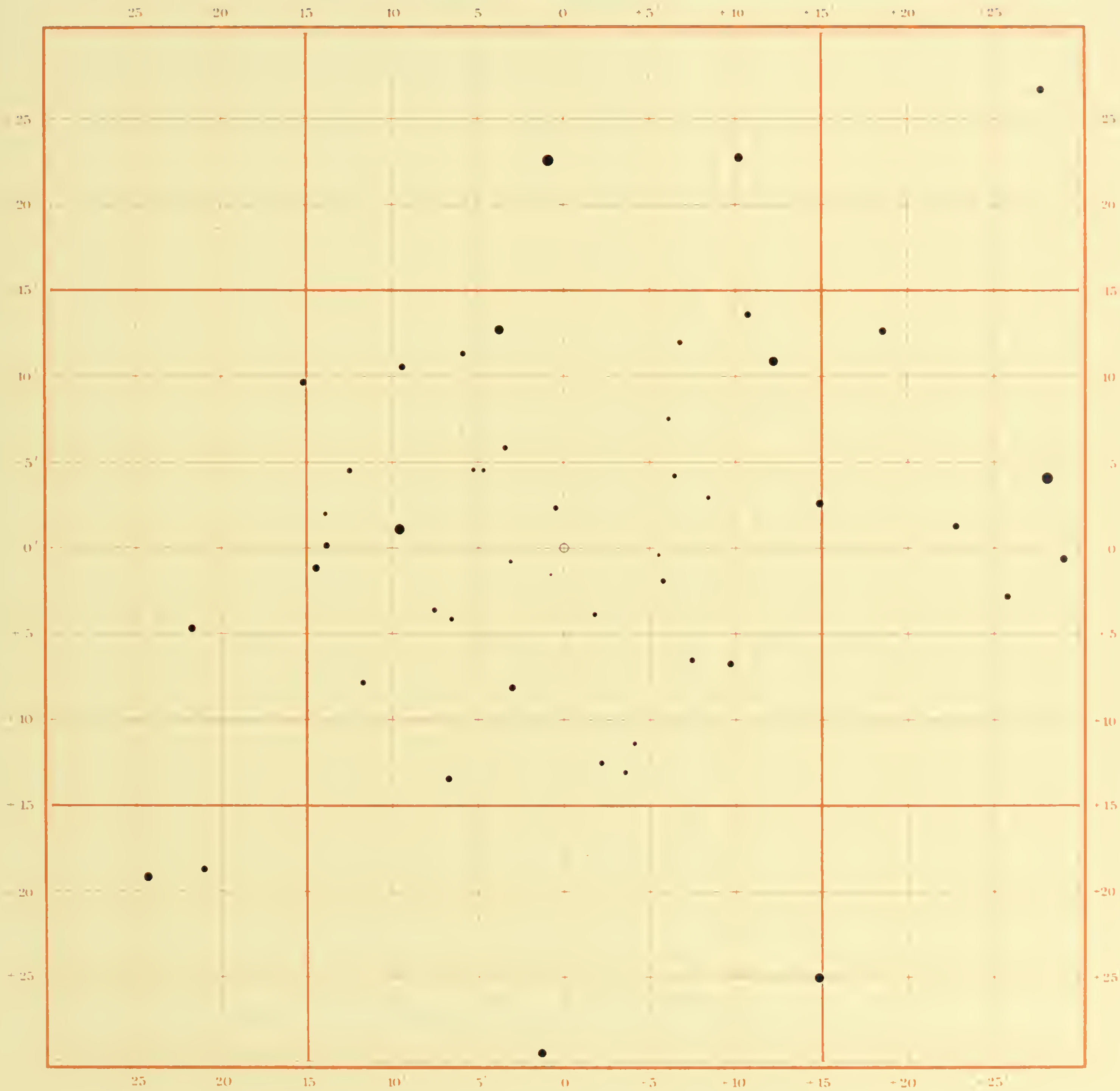
SPECOLA VATICANA, ROMA GRAPH. INSTITUT JULIUS KLINKHARDT LEIPZIG

194604

X Aquilae

(1925.0) $19^h\ 47^m\ 46^s$ $(+2^s.98)$ $+4^\circ\ 16'.3$ $(+0'.15)$

Spectrum Me Magn. $8\frac{1}{2}$—<$13\frac{1}{2}$





7 8 9 10 11 12 13 14

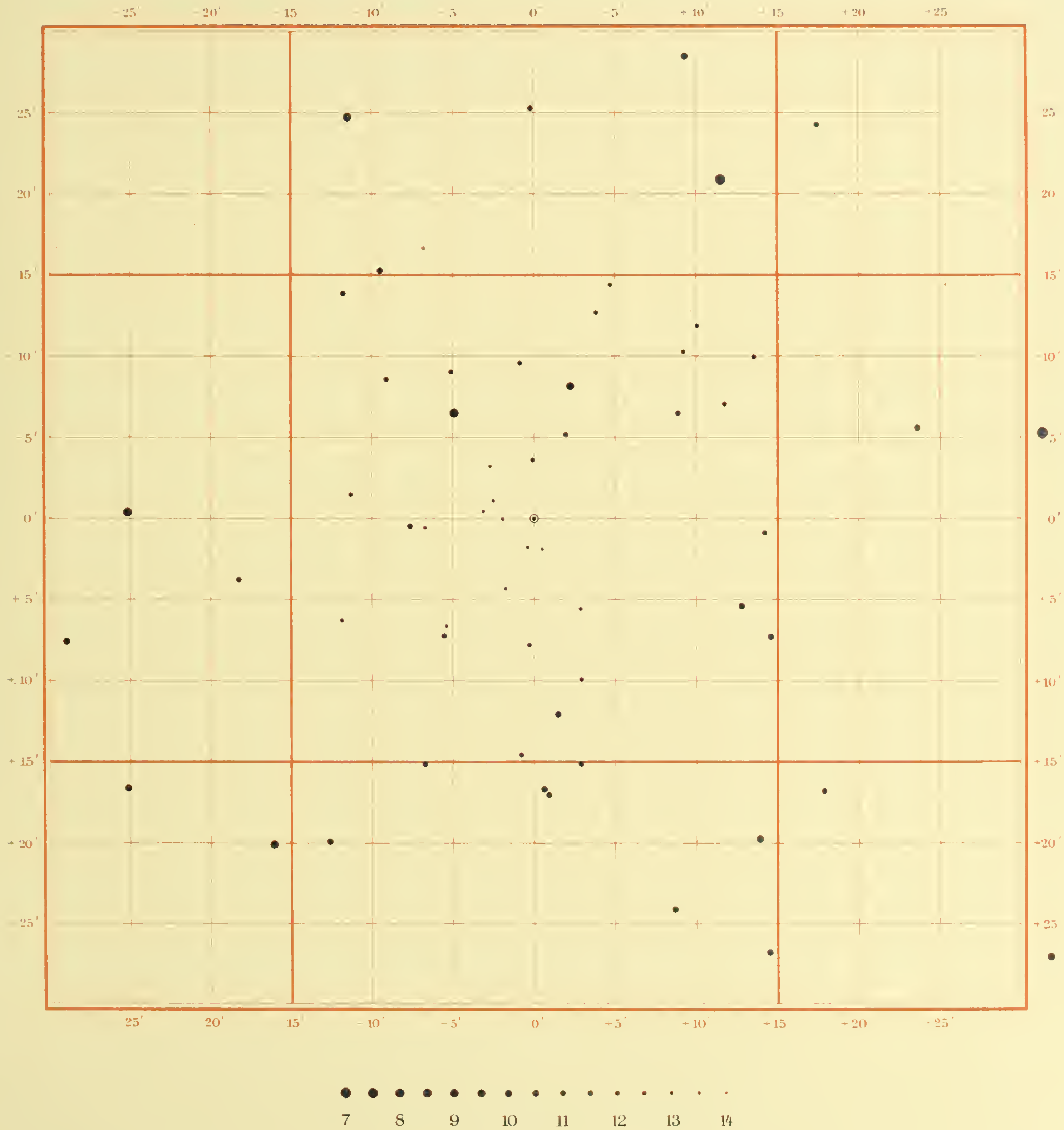
Series VII

195202

RR Aquilae

(1925.0) 19^h 53^m 43^s (+3^s.12) −2° 5′.2 (+0′.16)

Spectrum Me Magn. 8½—13

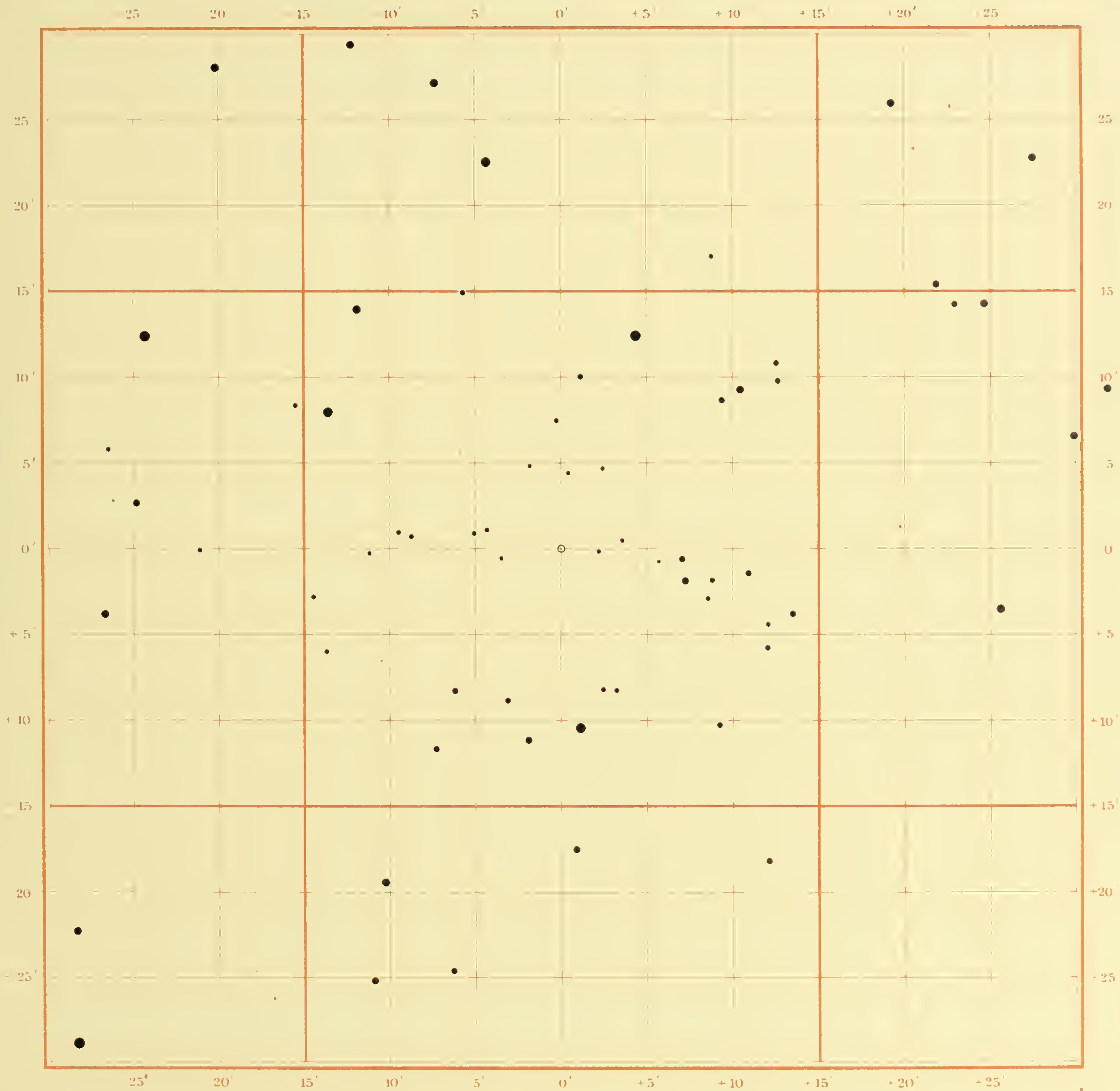


Series VII

RS Aquilae

(1925.0) $19^h\ 55^m\ 4^s$ $(+3\overset{s}{.}24)$ -8° $5\overset{\prime}{.}3$ $(+0\overset{\prime}{.}16)$

Spectrum Me Magn. 10—<14



7 8 9 10 11 12 13 14

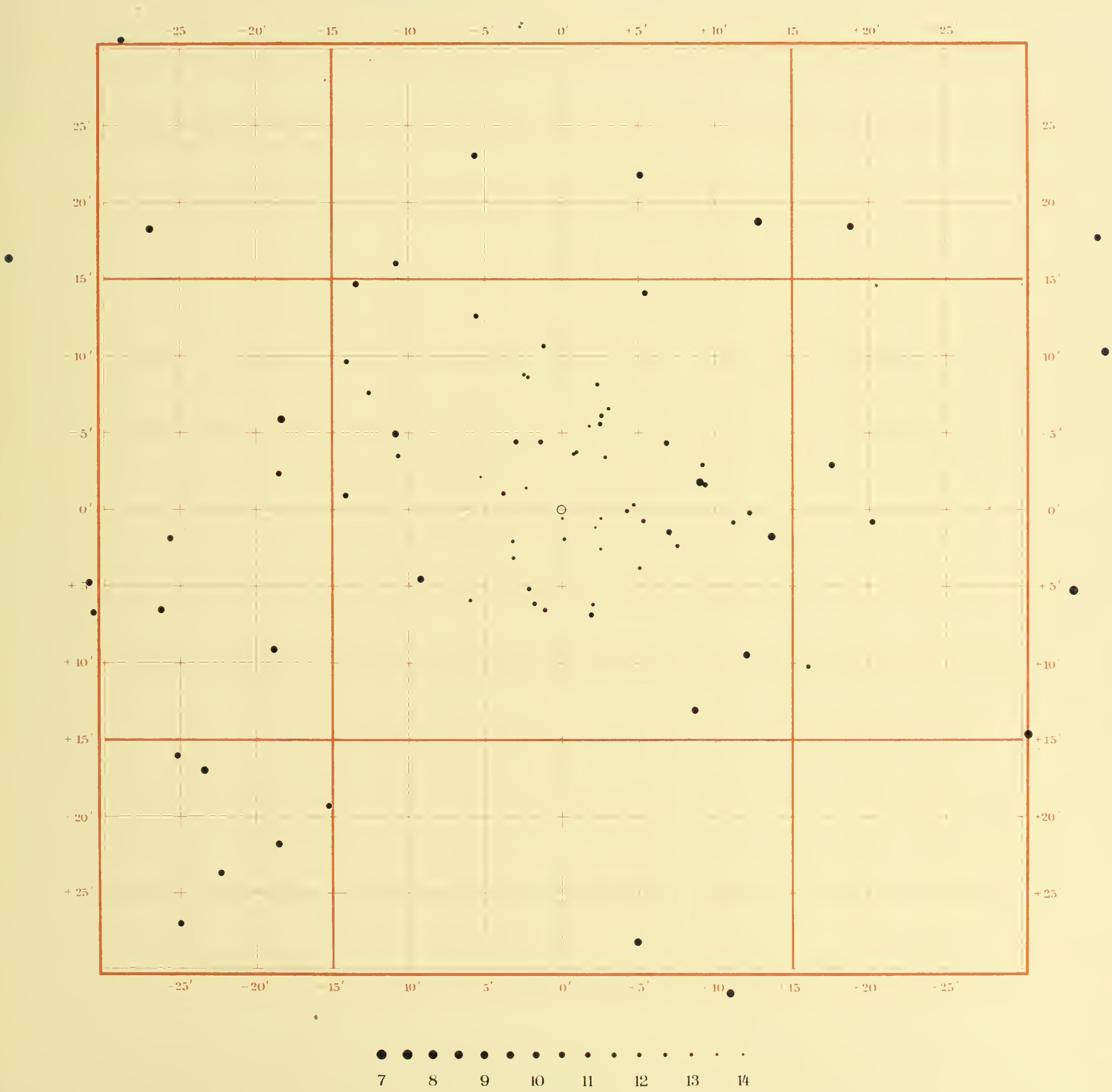
Series VII

200812

RU Aquilae

(1925.0) 20h 9m 14s (+2.82s) +12° 46′.2 (+0′.18)

Spectrum Me Magn. 8—14½



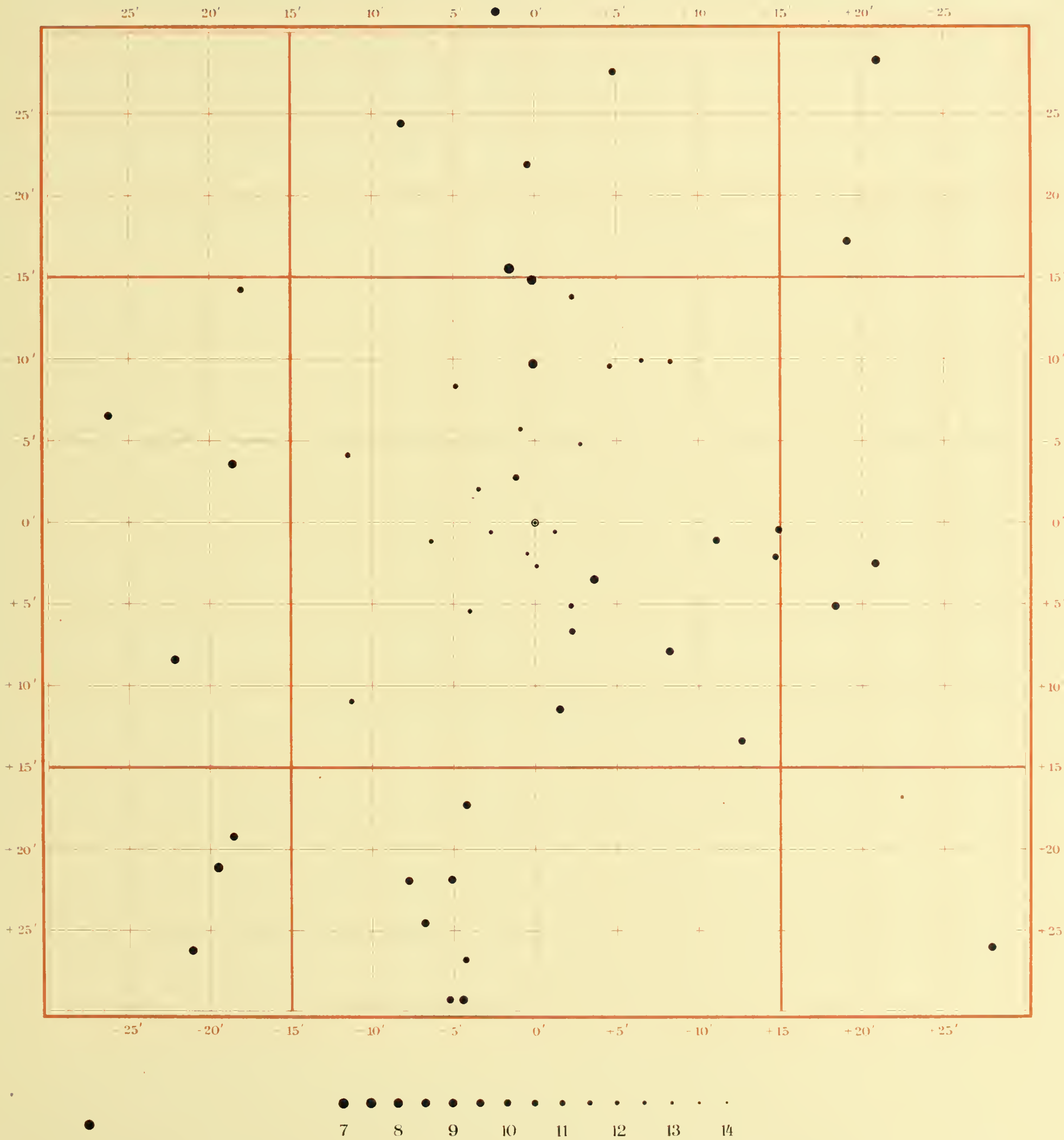
Series VII

201942

UW Cygni

(1925.0) $20^h\ 20^m\ 29^s$ $(+2^s.05)$ $+43^\circ\ 0'.0$ $(+0'.19)$

Spectrum A? Magn. $10\frac{1}{2}$—13



Series VII